# VITA

NAME Bozenna Pasik-Duncan

http://www.math.ku.edu/ksacg/Bozenna.html

BORN June 30, 1947, Radom, Poland

ADDRESS 1208 Schwarz Road, Lawrence, KS 66049

#### **EDUCATION**

- **1986** D.Sc. Habilitation Doctorate Degree, Department of Mathematics, the Warsaw School of Economics (SGH) (Mathematical Statistics and Stochastic Adaptive Control)
- **1978** Ph.D., Department of Mathematics, the Warsaw School of Economics (SGH) (Stochastic Processes)
- **1976** Diploma, the 2 year Program in Education, the Warsaw School of Economics (SGH)
- **1970** M.Sc., Department of Mathematics, the Warsaw University (Numerical Analysis)

### **POSITIONS HELD**

Current	2017 Global Chair, IEEE Women in Engineering (WIE) Committee
Current	IEEE Society for Social Implications of Technology (SSIT), elected member of the Board of Governors
Current	IEEE Control Systems Society (CSS), elected member of the Board of Governors
Current	Member, Technical Board of International Federation of Automatic Control (IFAC)
Current	Deputy Chair, IEEE Technical Committee on Control Education
Current	Chair, American Automatic Control Council (AACC) Technical Committee on Education
Current	Founder and Faculty Advisor, KU Student Chapter of Association for Women in Mathematics (AWM)
Current	Founder and Member of Advisory Board, IEEE CSS Women in Control (WIC)
2014-present	Courtesy Professor, Aerospace Engineering, KU
2006-present	Courtesy Professor, Electrical Engineering and Computer Science, KU
2004-present	Investigator, Information and Telecommunication Technology Center, KU
2008-2014	Chair, IFAC Technical Committee on Control Education
2006-2012	CSS liaison to the IEEE Women in Engineering (WIE) Committee
1993-present	Professor, Mathematics Department, University of Kansas (KU)

1989-1993	Associate Professor, Mathematics Department, KU
1987-1989	Assistant Professor, Mathematics Department, KU
1984-1987	Instructor, Mathematics Department, KU
1983 (Spring)	Research Associate, Mathematics Department, KU
1982 (Summer and Fall)	IREX Fellow for research at the University of Kansas, Mathematics Department; University of California-Berkeley, Department of Electrical Engineering and Computer Science; University of Maryland- Baltimore County, Mathematics Department; University of Maryland-College Park, Department of Electrical Engineering; Harvard University, MIT, Boston University, Systems and Control Laboratories
1978-1984	Assistant Professor, Mathematics Department, the Warsaw School of Economics
1973-1975	Lecturer, Mathematics Department, the Warsaw University Of Technology
1970-1978	Teaching Assistant, Mathematics Department, the Warsaw School of Economics

# AWARDS and HONORS

### 2017 IEEE Women in Engineering (WIE) Committee Chair

I am leading the international women in engineering organization within IEEE focused on inspiring, engaging and advancing women in technology. IEEE WIE is a vibrant community of IEEE women and men collectively using their diverse talents to innovate for the benefit of humanity.

I lead an organization with over 800 affinity groups and over 22,000 members in more than 40 countries. Our mission is to inspire the next generation of girls and women in STEM, to engage an incredible community of women in technology and advance women within the field through awards, visibility and career development.

In this capacity, I lead a committee with 9 international members at large, over 45 technical society liaisons, 10 geographic region coordinators and 4 staff members. Each year, we impact over 100,000 individuals including pre-university students, university and graduate students and women in the profession through close to 1000 activities including outreach events introducing STEM to young girls, humanitarian projects enhancing lives of communities through the application of technology and technical and professional development seminars, workshops, conferences, and online presentations.

August 2015 – 2020	Chancellors Club Teaching Professorship
January 2017-2020	Elected Member of the Board of Governors of IEEE CSS
January 2016 – 2019	Elected Member of the Board of Governors of IEEE SSIT
January 2016 – 2020	Member of Mathematical Association of America (MAA) Haimo Distinguished Teaching Award Selection Committee
January 2016 – 2020	Member, AWM G. Humpreys Award Selection Committee
2016	Invited Keynote Speaker at 3 International Workshops in Taiwan,

Page 3	Pasik-Duncan Vita
	Hungary and Czech Republic (May, June and October)
2016	2016 IEE Educational Activities Board (EAB) Meritorious Achievement Award in Continuing Education "for innovative developments in teaching Control systems and inspiring STEM education."
June 2016	The General Chair of the International Federation of Automatic Control (IFAC) as the first time woman to hold this position for the General Chair of the IFAC Symposium on Advances in Control Education (ACE2016), June 2016, Bratislava, Slovakia
December 2015	Interview for IEEE Women in Engineering Magazine
July 2015	Co- Chair the Society for Industrial and Applied Mathematics (SIAM) Control and Its Applications Conference, CT15, Paris, 2015
March 2015	Elected by the IEEE Control Systems Society (CSS) Board of Governors to represent the CSS on the IEEE Technical Activities Board Ad Hoc Committee on Technical Support for Humanitarian Activities
January 2015	Elected by the IEEE Control Systems Society (CSS) Board of Governors to represent the Society on the IEEE-USA Career & Workforce Policy Committee as External Member
January 2015	Reelected by the IEEE CSS Board of Governors Liaison Representative to the IEEE Society on Social Implications of Technology (SSIT)
January 2015	Reelected by IEEE Membership Committee Member of the 9 voting member IEEE Women in Engineering Committee
2014-2015	Elected Member of the KU Distinguished Professors Committee (2 <sup>nd</sup> term)
May 2014	Elected to 3-year term as Member of the KU Faculty Senate and University Senate
April 2014	Featured in LJW article on research and teaching.
March 2014	Elected by the SIAM Council as Chair of the SIAM Conference on Control Theory & Its Applications to be held in Paris, France, July 8-10, 2015
February 2014	Appointed by the KU Provost as Courtesy Professor of Aerospace Engineering
January 2014	Elected Program Director of the SIAM Activity Group on Control and Systems Theory (SIAG/CST)
January 2014	Elected Member of the IEEE Women in Engineering (WIE) Committee
January 2014	Elected by the General Council of the International Federation of Automatic Control (IFAC) as Member of the Technical Board with 39 Technical Committees
December 2013	Interviewed by the Editor of the IEEE CSS Magazine
December 2013	Served as IEEE WIE Delegate to the UNESCO/IGU Workshop on Women in Engineering in Africa and the Arab States

Page 4	Pasik-Duncan Vita
July 2013	Elected Fellow of IFAC for "important contributions to stochastic adaptive control, inspiring vision of control as a field that spans science, technology, engineering and mathematics, and for her commitment to control education"
March 2013	Elected Member of the IEEE - USA Communications Committee
March 2013	Appointed Member of the Society of Social Implication of Technology (SSIT) Board of Governors Google Group
February 2013	Invited Speaker at the KU Student Involvement & Leadership Center
February 2013	Invited Speaker at the Public Library in Independence, Kansas
January 2013	Invited Panelist at IEEE Women in Engineering/Google Joint Conference "Enhancing the Sustainability of Women in Technology", Google, Mountain View, CA
January 2013	Elected Member of the Board of Governors of the IEEE Society on Social Implications of Technology (SSIT)
January 2013	Elected IEEE Control Systems Society (CSS) Liaison to IEEE Society on Social Implications of Technology (SSIT)
January 2013	Reelected Chair of the American Automatic Control Council (AACC) Technical Committee on Education
December 2012	Reelected Member of the IEEE CSS Conference Editorial Board
October 2012	Elected Chair of the IFAC Education Liaison Initiative
August 2012	Elected Member of the KU Distinguished Professors Committee
June 2012	Invited Panelist on the Panel Session at the IFAC International Symposium on Advances in Education, Nizhny, Russia
March 2012	Outstanding Education Service Award "in recognition of your exemplary dedication and outstanding service in education," The Institute of Interfaith Dialog
March 2012	Elected Member of the KU Women's Hall of Fame Selection Committee
January 2012	Invited Mentor for two women participating in the Association for Women in Mathematics (AWM) Workshop at the American Mathematical Society (AMS) Meeting, Boston, MA
December 2011	Reelected for the 4th term as IEEE Control Systems Society (CSS) Liaison to the IEEE Women in Engineering (WIE) Committee
December 2011	Reelected for the 10th term to the Technical Board of the IEEE Control Systems Society (CSS) as the Chair of the Technical Committee on Control Education
October 2011	Keynote Speaker at the Orientation for International Students at KU
September 2011	Plenary Speaker at the Conference on Applications of Mathematics, Zakopane, Poland

Page 5	Pasik-Duncan Vita
September 2011	Plenary Speaker at the 6th Ph.D. and Young Scientists Conference "Young Scientists Towards the Challenges of Modern Technology," Warsaw, Poland
August 2011	Reelected for the second term to the Technical Board (of 39 technical committees) of the International Federation of Automatic Control (IFAC) with 52 national organization members, as the Chair of the Technical Committee on Control Education (the only chair representing U.S.A among 40 chairs) by the IFAC Council at its meeting at the 2011 IFAC Congress in Milan, Italy.
August 2011	Reelected for the second term to the IFAC Awards Committee as the chair of the Harold Chestnut Control Engineering Textbook Prize Selection Committee (the only reelected member on the Awards Committee).
August 2011	Organizer and Moderator of the Panel Session on "Preparing Tomorrow's Scientists and Engineers for the Challenges of the 21st Century" with 15 panelists representing 50 countries/members of the International Federation of Automatic Control (IFAC) at the 2011 IFAC World Congress in Milan, Italy
August 2011	LJWorld article: "Watershed moments shaped Professor Bozenna Pasik- Duncan's love for teaching, mathematics"
July 2011	Elected Member of the Organizing Committee of the SIAM Conference on Control Theory and Its Applications, Baltimore, MD
June 2011	Elected Member of the SIAM Group on Control Election Committee
May 2011	Steeples Service to Kansas Award, recognized at the 2011 Graduation Ceremony. The Award recognizes "outstanding service by KU faculty to other Kansans"
May 2011	Invited Panelist on the Panel Session "Future Directions in Systems Theory and Control", International Workshop in Honor of 60th Birthday of Edwardo Sontag, Rutgers University, NJ
2010-2011	Member of the Editorial Board for the 2011 IFAC World Congress
September 2010	Plenary Speaker at the Conference on Applications of Mathematics, Zakopane, Poland
2010	Past President of President of KU's Alpha Pi Chapter of Phi Beta Delta; the honor society for international education and scholarship
September 2009	Plenary Speaker with Inauguration Talk: "The Beauty of a Field that Spans Science and Engineering" at the Ph.D. and Young Scientists Conference "Young Scientists Towards the Challenges of Modern Technology", Warsaw, Poland
Nov 2009-2011	Elected IEEE Control Systems Society Board of Governors as Liaison to the IEEE Women in Engineering (WIE) Committee
July 2009	Editor-in-Chief of IFAC Control Resources Publications, elected by the International Federation of Automatic Control (IFAC) Council

2009-2011	Member of the IFAC Awards Board
Spring 2009	Inducted to The KU Women's Hall of Fame
Fall 2008	Sabbatical leave, visiting several research institutions
2008-2009	President of KU's Alpha Pi Chapter of Phi of Phi Beta Delta; the honor society for international education and scholarship
2008-2009	Fourth term elected Chair of the Technical Committee on Control Education of the IEEE Control Systems Society (CSS)
2008	Chair for the 2008-2011 Triennium International Federation of Automatic Control (IFAC) Harold Chestnut
Control Engineering Te	xtbook Prize Award Committee
2008	Member of the IFAC Awards Committee
2008	Chair, the IFAC Technical Committee on Control Education for the 2008-2011 Triennium
2008	Member of the IFAC Technical Board for the 2008-2011 Triennium
2008	Elected to the KU Faculty Senate
2007-2008	Third term co-Chair of the International Federation of Automatic Control Committee on Control Education appointed by the Board of the International Federation of Automatic Control (IFAC)
2007-2008	Second term Elected Member at Large of the Board of Friends for the Lied Center
2007-2008	Second term Member of the IEEE Women in Engineering Committee as the elected IEEE Control Systems Society Liaison
2007-2008	Fourth term elected Chair of the American Automatic Control Council (AACC) Technical Committee on Control Education
2007	Second nomination by the president of CSS for J. R. Ragazzini Award
2006-2009	Elected member of the KU University Distinguished Professors Committee
2006-2009	Elected member of the KU Faculty Senate Research Committee
2006	Appointed Member of the IEEE Women in Engineering Committee as the Elected IEEE Control Systems Society Liaison
2006	Delegate elected by the Board of Governors of the Control Systems Society to represent the Society in the Institute of Electrical and Electronics Engineering (IEEE) Women in Engineering Committee (WIEC) at the Semiannual Meeting of the Committee in April in Los Angeles.

Page 7	Pasik-Duncan Vita
2005	Nominated for Chancellor's Teaching Award
2004, 2000	Nominated twice for Higuchi/Endowment Research Achievement Awards
2004	14th Annual Louise Hay Award of the Association for Women in Mathematics for "the wide range of her outstanding work as mathematician, for her inspiring vision of mathematics as a discipline and as profession, and for her commitment in carrying out the role of a professional mathematician in a wide variety of communities and settings"
2003	Selected by the Dean to represent the KU at the First Forum of the Center for the Integration of Research, Teaching and Learning on Preparing the Future Science, Technology, Engineering and Mathematics Faculty, November 2003, Madison, Wisconsin
2003	Elected Member of the Board for Friends of the Lied Center in Lawrence
2003	Outstanding Educator 2003, Torch Chapter, Mortar Board National Honor Society
2002	Frank B. Morrison Teaching Award for distinguished teaching and the profound impact made in students' lives, University of Kansas
2002	HOPE (Honor for an Outstanding Progressive Educator) Award, remains the only mathematics professor to have received the award
2002	Phi Beta Delta, Honor Society for International Scholars
2001	Elected Fellow of IEEE for "outstanding contributions to Identification and Stochastic Adaptive Control"
2000	Leader of Control Systems Delegation to China, sponsored by the People to People Ambassador Programs
2000	IEEE Control Systems Society Distinguished Member Award for "significant technical contributions and outstanding long-term service to the CSS"
2000	IEEE Third Millennium Medal for "outstanding achievements and contributions"
2000	Inclusion in the fourth edition on Who's Who Among America's Teachers, 2000
1996	Inclusion in the fourth edition on Who's Who Among America's Teachers, 1996
1996	W. T. Kemper Fellowship for "Teaching Excellence and Advising in Public Outreach"
1996	Senior Member of the IEEE Control Society
1999	G. Baley Price Award for Excellence in Teaching, Mathematics Graduate Students Association, University of Kansas

1991-1993	Career Advancement Award from NSF
1982	International Research Exchange (IREX) Fellowship to U.S.A.
Fall 1980	On leave - Semester on Optimal Control, Banach International Center of Mathematics, Warsaw
1980	Award for research excellence from the Polish Central Planning Committee
1977-1978	Teaching Award and salary supplement from the Warsaw School of Economics
1978	Chancellor Award for outstanding Ph. D. dissertation from the Warsaw School of Economics
1976	Chancellor Research Award from the Warsaw School of Economics
1973-1980	Grant from the Polish Central Planning Committee
1975	National Teaching Award from the Ministry of Higher Education and Sciences in Poland - the highest National Teaching Award for Teaching and Research Excellence

### **RESEARCH SUPPORT**

- **2016-2019** Pasik-Duncan, B. (Co-PI), *AFOSR Grant*. App. \$498, 978
- **2016-2017** Pasik-Duncan, B. (Co-PI), *NSF REU*. App. \$10, 000
- 2016 Pasik-Duncan, B. IEEE Travel Grant. (\$2,000)
- **2014-2017** NSF Grant, Co-P.I. with T. E. Duncan (\$300,000)
- **2014-2017** ARO Grant, Co-P.I. with T. E. Duncan (\$387,115)
- 2014–2016 Pasik-Duncan, B. (Principal). AACC Outreach Fund, (\$21,000)
- **2012-2013** IEEE CSS Outreach Fund, P.I. (\$12,500)
- **2012-2015** AFOSR Grant, Co-P.I. with T. E. Duncan (\$368,596)
- **2011-2015** NSF Grant, Co-P.I. with T. E. Duncan (\$330,000)
- **2010-2014** ARO Grant, Co-P.I. with T. E. Duncan (\$319,340)
- **2009-2012** AFOSR Grant, Co-P.I. with T. E. Duncan (\$395,004)

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2008-2016	Pasik-Duncan, B. (Co-PI), Collaborative grant – Kansas Partnership for Graduate Fellow in K-12 Education (NSF), GK-12 Grant. NSF \$2,900,000
2008-2012	NSF Grant, Co-P.I. with T. E. Duncan (\$300,000)
2006	NSF Grant Workshop for Middle and High School Teachers and Students, San Diego
2005-2008	NSF Grant, Co-P.I. with T. E. Duncan
2005-2008	NSF Travel and Mentoring Grant for the Association for Women in Mathematics, Co-P.I.
2003-2004	NSF REU supplement
2003	NSF Grant - Travel Support to the CDC in Hawaii for Graduate Students
2003	NSF Grant - Workshop for High School Teachers and Students, Maui, Hawaii
2002-2005	NSF Grant, Co-P.I. with T. E. Duncan
2002	NSF Grant - Workshop for High School Teachers, Denver
2001-2005	NSF Travel and Mentoring Grant for the Association for Women in Mathematics
2001-2002	NASA EPSCOR, Co-P.I. with T. E. Duncan
2001	NSF Grant - Workshop for High School Students, Las Vegas
2001	NSF Grant - Workshop on Stochastic Theory and Control, University of Kansas, October 2001
2000	NSF Grant - Workshop for High School Teachers of Math and Science, Chicago 1998 Sprint Grant, Co-P.I. with T. E. Duncan
1998-2002	Sprint Grant, Co-P.I. with T. E. Duncan
1998-2002	NSF Grant, Co-P.I. with T. E. Duncan

- **1997-1998** P.I. (funding for an international conference at the University of Southern California)
- 1997 Sprint Grant, Co-P.I. with T. E. Duncan
- 1997 Research Experiences for Undergraduates, Supplement to NSF Grant
- 1996-1999 NSF Grant, Co-P.I. with T. E. Duncan
- 1996 Research Experiences for Undergraduates, Supplement to NSF Grant
- 1995 Research Experiences for Undergraduates, Supplement to NSF Grant
- 1994 Research Experiences for Undergraduates, Supplement to NSF Grant

1993-1996	NSF Grant, Co-P.I. with T. E. Duncan
1993	Research Experiences for Undergraduates, Supplement to NSF grant
1992	Research Experiences for Undergraduates, Supplement to NSF grant
1991-1993	Career Advancement Award from NSF
1991-1992	NSF Grant, Co-P.I. with T. E. Duncan
1988-1991	NSF Grant, Co-P.I. with T. E. Duncan
1987	Summer Grant for research from University of Kansas
1982	International Research Exchange (IREX) Fellowship to U.S.A.
1973-1980	Research Grant from the Polish Central Planning Committee

## PROFESSIONAL ACTIVITIES

Referee NSF, IEEE, Mathematical Reviews, J. Optimization Theory and Appl., Automatica, J. Applied Math. and Stochastic Analysis, Stochastic and Stochastic Reports, J. Math. Systems, Estimation and Control, Journal of Intelligent and Fuzzy Systems, Communications in Information and Systems, International Journal on Control, European Funding Committee, Elsevier: Hybrid Systems, IEEE CSS Editorial Board, MED16, IFAC ACE16.

2017	Member, IPC of the 2017 IFAC World Congress
2016-2020	Member, MAA Haimo Distinguished Teaching Award
2016-2020	Member, Gweneth Humpreys Award for Mentorship of Undergraduate Women in Mathematics
Current	Associate Editor of Elsevier Editorial Board Member for Nonlinear Analysis: Hybrid Systems
Current	IEEE Control Systems Society – Women in Control Advisory Board and Nominating Committee Member, Deputy Chair of the Technical Committee on Control Education
Current	IEEE Society for Social Implications of Technology: elected member of the Board of Governors
Current	IEEE Women in Engineering (WIE) of 16, 000 members with 600 Affinity Groups around the Globe: one of 9 voting members; the Chair of the Outreach Sub-Committee
Current	Technical Board Member as IFAC TC Liaison, coordinating education activities of 39 Technical committees
Current	Member, AACC Nominating Committee

2016	Associate Editor of Communications in Information and Systems Journal
2016	Associate Editor of Risk and Decision Analysis Journal
2016	Associate Editor of IEEE CSS Conference Editorial Board
2016	Nominating Committee Member of the Emily Taylor Center KU Women's Hall of Fame
2016	Member, KU Center for Teaching Excellence C21 Community
2016	Member, Memorial Union Cooperation Board
2016	Secretary, SIGMA XI Chapter at KU
2016	IFAC ACE in June, 2016 in Bratislava, Slovakia
2015-Present	KU Faculty Senate General Research Funding Committee
2015-2016	Member of 7 Ph.D. Committees in Economics
2015	General Chair of SIAM CT15, Paris, France
2015-Present	IEEE CSS Conference Editorial Board
2015	Editor of the 2015 Communications in Information and Systems Special Volume in Honor of Wing-Shing Wong, The Chinese University of Hong Kong
2015	Member of IPC of 9 <sup>th</sup> IFAC Symposium on Biological and Medical Systems (BMS 2015), Berlin, Germany, August 31 – September 2
2015	Member of IPC of 1 <sup>st</sup> Conference on Modeling, Identification and Control of Nonlinear Systems (MICNON-2015), Saint-Petersburg, Russia, June 24-26
2015	Member of IPC of 23 <sup>rd</sup> Mediterranean Conference on Control and Automation (MED 2015), Torremolinos, Spain, June 16-19
2015	Member of IPC of 8 <sup>th</sup> Vienna Conference on Mathematical Modeling (MATHMOD), Vienna, Austria, February 18-20
2014-Present	Courtesy Professor AE
2014-2017	Member of the KU Faculty Senate and University Senate
2014-2016	Member of 5 Ph.D. Committees in Music
2014-2015	Second Term Elected Member of the KU Distinguished Professors Committee
2014-2015	Program Director of the SIAM Activity Group on Control and Systems Theory (SIAG/CST)
2014-2015	ACC 2014, ACC 2015, CDC 2014, Workshop for Middle and High School Students and Teachers: "The Beauty of Controls", Co-organizer and Chair, Portland, Chicago & LA
2014	Co-organizer and Co-chair of the Middle and High School Students and Teachers: "The Power, Beauty and Excitement of the Cross-Boundaries Nature

Page 12	Pasik-Duncan Vita
	of Control, a Field that Science, Technology, Engineering and Mathematics (STEM)," CDC, Los Angeles, CA, December 15
2014	19th IFAC World Congress, Cape Town, South Africa, August 24-29:
	<ul> <li>a. Associate Editor of the International Program Committee</li> <li>b. Co-organizer of the Panel Session on Innovative Teaching in Preparing Tomorrow's Scientists and Engineers for the Challenges and Opportunities of the 21<sup>st</sup> Century</li> <li>c. Co-organizer of the Beauty of Feedback Control Workshop for High School Students and Teachers</li> </ul>
2014	Co-organizer of the Workshop: "Emerging Frontiers in Adaptive Systems and Learning," ACC, Portland, OR, June 3
2014	Co-organizer and Chair of the Workshop for Middle and High School Students and Teachers: "The Beauty of Controls," ACC, Portland, OR, June 3
2013	IEEE WIE Delegate to the UNESCO/IGU Workshop on Women in Engineering in Africa and the Arab States, Paris, France, December 10
2013	Member of Organizing Committee for the SIAM Conference on Control Theory and its Applications (CT13), San Diego, CA, July 8-10
2013	Co-organizer and Co-chair of the Special Session: "History of Workshops for Middle and High School Students And Teachers: Ideas and Technology of Control Systems," ACC, Washington, D.C., June 19
2013	Co-organizer and Co-chair of the Special Session: "History of Women in Control," ACC, Washington, D.C., June 18
2013	Co-organizer and Chair of the Workshop for Middle and High School Students and Teachers: "The Beauty of Controls," ACC, Washington, D.C., June 17
2013	Invited talk on The Beauty and Power of Control: A Field that Spans Science, Technology, Engineering, and Mathematics (STEM) at the KU Center for Data Analysis, March
2013	Invited talk on The Beauty and Power of Control: A Field that Spans Science, Technology, Engineering, and Mathematics (STEM) at the Public Library, Independence, Kansas, February
2013	Invited talk on The Beauty and Power of Control: A Field that Spans Science, Technology, Engineering, and Mathematics (STEM) at the KU Student Involvement Leadership Center, February
2012-2013	Panelist on the NSF Review Panels
2012	Organizer and Chair of the Workshop for Middle and High School Students and Teachers: "The Ideas and Technology of Control Systems: The Power and Beauty of a Field that Spans Science, Technology, Engineering and Mathematics (STEM)," CDC, Maui, HI, December 12

Page 13	Pasik-Duncan Vita
2012	Organizer and Chair of the "Ideas and Technology of Control Systems Workshop" for High School Students and Teachers, 2012 IEEE MSC, Dubrovnik, Croatia, October 2
2012	Organizer and Chair of the Special Education Session: "New Challenges and Opportunities in Control Education: Control for Physicists," ACC, Montreal, Canada, June 28
2012	Member of the International Organizing Committee of the 2012 IEEE Multi- conference on Systems and Control
2012	Member of several IFAC Symposia and Workshops International Programs
2012	Member of the KU Women's Hall of Fame Selection Committee
2012	Mentor for two women participating in the Association for Women in Mathematics (AWM) Workshop at the American Mathematical Society (AMS) Meeting, Boston, MA
2011–Present	KU Spencer Museum, Advisory Board for Education Program, Member.
2011-2012	4th term as IEEE Control Systems Society (CSS) Liaison to the IEEE Women in Engineering (WIE) Committee
2011-2012	10th term Member of the Technical Board of the IEEE Control Systems Society (CSS) as the Chair of the Technical Committee on Control Education
2011	Keynote Speaker at the Orientation for International Students at KU
2011-2014	Reelected Member for the second term to the Technical Board (of 39 technical committees) of the International Federation of Automatic Control (IFAC) with 50 national organization members, as the Chair of the Technical Committee on Control Education by the IFAC Council at its meeting at the 2011 IFAC Congress, Member, Milan, Italy. (2011 - 2014)
2011-2014	Second term elected member of IFAC Awards Committee as the chair of the Harold Chestnut Control Engineering Textbook Prize Selection Committee (elected), Member.
2011	Organizer and Chair of the Special Control Education Session: "New Challenges and Opportunities in Control Education," CDC/ECC, Orlando, FL, December 14 (100 participants).
2011	Organizer and Chair of the "Ideas and Technology of Control Systems" Workshop for High School Teachers and Students, CDC/ECC, Orlando, FL, December 12 (150 participants).
2011	Organizer and Moderator of the Special Panel Session on Education: "Preparing Tomorrow's Scientists and Engineers for the Challenges of the 21st century," with 15 panelists representing 50 countries/members of the International Federation of Automatic Control (IFAC) at the 18th IFAC World Congress, Milan, Italy, September 1.
2011	Organizer and Chair of the Special Education Session: "Emerging Control Education Issues. Plain Talks on Systems & Control for a Wide Range of the Public (Revisited)," ACC, San Francisco, CA, June 29.

2011	SIAM Conference on Control Theory and its Applications (CT11), Baltimore, MD, July 25-27
	<ul><li>a. Member of Organizing Committee</li><li>b. Organizer and Co-organizer of 3 mini-symposia</li></ul>
2011	Elected Member of the SIAM Group on Control Election Committee
2010-Present	Chair, AACC Technical Committee on Education
2010-2011	Member of the Editorial Board for the 2011 IFAC World Congress
2010	Member of the International Program Committee of 15th MMAR, August 2010, Miedzyzdroje, Poland
2010	Member of the International Program Committee of IFAC Symposia
2010-Present	Chair of IEEE CSS and IFAC Technical Committees on Control Education
2010	Member of the IFAC Awards, Publications and Technical Boards
2010	Member of the International Technical Board for IFAC World Congress, Milan, Italy, August 2011
2010	Organizer and Chair of the Special Education Session: "Preparing Tomorrow's Scientists and Engineers for the Challenges of the 21st Century," CDC, Altanta, GA, December 16
2010	Organizer and Chair of the Pre-Conference Workshop for High School Students and Teachers: "The Ideas and Technology of Control Systems: The Power and Beauty of a Field that Spans Science, Technology, Engineering and Mathematics (STEM)," CDC, Atlanta, GA, December 14 (550 participants)
2010	Organizer and Chair of the Special Education Session: "Discussion on Control Textbooks at Undergraduate and Graduate Levels and Control Resources Publications," ACC, Baltimore, MD, July 1
2010	Organizer and Chair of the Pre-Conference Workshop for High School Teachers and Students: "The Ideas and Technology of Control The Power and Beauty of a Field that Spans Science, Technology, Engineering and Mathematics (STEM)," ACC, Baltimore, MD, June 29
2010	Member of KU Faculty Senate
2009-present	Member of Scientific Board for the Young Scientists Towards the Challenges of Modern Technology, International Ph.D. Students and Young Scientists Conference
2009	Organizer of 3 Invited Sessions at The Combined 48 <sup>th</sup> IEEE Conference on Decision and Control and 28 <sup>th</sup> Chinese Control Conference, Shanghai, China, December 16-18
2009	Member of the International Program Committee of Advances in Control Education, Japan, October
2009	SIAM Conference on Control and its Applications (CT09), Denver, Colorado, July

	6-8
	<ul><li>a. Member of Organizing Committee</li><li>b. Organizer and Co-organizer of 4 mini-symposia</li></ul>
2009	Organizer and Chair of the Special Education Session: "Preparing tomorrow's scientists and engineers for the challenges of the 21st century," ACC, St. Louis, MO, June.
2009	Organizer and Chair of the Workshop for High School Teachers and Students: "The Power, Beauty and Excitement of a Field that Spans Science, Technology, Engineering and Mathematics (STEM)," ACC, St. Louis, MO, June
2008-Present	Member, IFAC Harold Chestnut Control Engineering Textbook Prize
2008	Organizer and Chair, Special Session on Education, Cancun, CDC, Mexico, December
2008	Co-organizer and Co-chair of the IEEE and IFAC Workshop on "The Power, Beauty and Excitement of the Cross-Boundaries Nature of Control," Seoul, Korea, July 6
2008	Organizer and Chair of the Special Education Session: "America's Engineering Crisis: How can we attract more students to engineering?" ACC, Seattle, WA, June 12
2008	Organizer and Chair of the NSF Workshop for High School Teachers, ACC, Seattle, WA, June 10
2008	90th anniversary of academician Ye. A. Barbashin, Belarusian State University and Institute of Mathematics of the National Academy of Sciences organized the International Conference Dynamical systems: stability, control, optimization, Minsk, Belarus, September 29 - October 4
2008	SIWN International Conference on Industrial Informatics and System Engineering (IISE 2008), at 2008 Systemics and Informatics World Congress (SIWN 2008), Glasgow, UK, 21-24 July
2008	ICNPAA 2008 Seventh International Conference on Mathematical Problems in Engineering, Aerospace and Sciences, University of Genoa, Genoa, Italy, 25-27 June
2008	Member of the International Program Committee of: American Control Conference, June, Seattle, and Conference on Control and Decision, December, Cancun, Mexico
2007	Member of the KU Honors Program Council
2007	Organizer and Chair of Panel Session on Stochastic Control in Financial Engineering Education, at the ACC in July, NY, (70 participants)
2007	Member of the International Program Committee (IPC) for the IEEE Conference on Decision and Control (CDC), New Orleans, LA, December
2007	Organizer and Chair of two Invited Sessions on Stochastic Systems, Identification and Control, IEEE CDC, New Orleans, LA, December.

Page 16	Pasik-Duncan Vita
2007	Organizer and Chair of the Special Education Session: "Plain Talk on Control for a Wide Range of the Public," CDC, New Orleans, LA, December 12
2007	Organizer and Chair of the NSF High School Students and Teachers Workshop: "The Power, Beauty and Excitement of the Cross-Boundary Nature of Control," CDC, New Orleans, LA, December 11
2007	Organizer and Co-organizer of two Invited Sessions on Risk Mathematics in Insurance and Finance at 2007 Decision and Risk Analysis Conference, Convergence between Finance and Industry, Dallas, TX, May 21-22
2007	Member of IPC for IFAC Adaptive and Learning in Control and Signal Processing, Saint Petersburg, Russia
2007	Member of IPC for the 2007 IFAC Large Scale Systems Conf, Gdansk, Poland
2007	Theme Track Chair, Control Methods in Finance, American Control Conference, New York, NY, July 11-13
2007	Organizer and Chair of the Special Session on Control Education and GK-12 Program, American Control Conference, New York, NY, July 12
2007	Organizer and Chair of the Panel Session on Stochastic Control Methods in Financial Engineering, American Control Conference, New York, NY, July 11
2006-Present	Courtesy Professor EECS
2006-Present	KU Mathematics Department Service
	Chair, Engineering Liaison Committee Chair, CTE Ambassadors Committee Chair, Nominating Committee Member, Calculus/Calculus Center Committee Member, Honors Committee Mentor, Junior Faculty Member Member, Undergraduate Steering Committee
2006-2008	At large Member of the Friends of the Lied Board of Directors, Lawrence, KS
2006-2007	Chair of the KU Mathematics Outreach Committee
2006-2007	Chair of the KU Mathematics Undergraduate Studies Lower Division
2006	Member of the Book Series Board, Book Series: World Publishing Company, Risk, Stochastics, Finance and Actuarial Science
2006	Member of the Organizing Committee of Great Plains Network/GENI First Workshop, Kansas State University, December 18
2006	Organizer and Chair of the Workshop for 650 Middle and High School Students and Teachers on "The Power, Beauty and Excitement of the Cross Boundary Nature of Control," 45th IEEE Conference on Decision and Control, San Diego, CA, December 13

Page 17	Pasik-Duncan Vita
2006	Organizer and Chair of the Panel Session on New Directions of Control at the CDC in December, San Diego, CA (100 participants)
2006	Organizer and Chair of the Invited Session, "Making New Connections with Stochastic Analysis, Stochastic Systems and Control," 45th IEEE Conference on Decision and Control, San Diego, December 13-15
2006	Co-organizer and Co-chair of the Invited Session on "Risk and Failure-Sensitive Control of Decentralized and Stochastic Systems," 45th IEEE Conference on Decision and Control, San Diego, December 13-15
2006	Organizer and Chair of the Panel Session, "Math, Science and Technology in Control Systems Education" - Part III, 45th IEEE Conference on Decision and Control, San Diego, December 13-15
2006-2009	Member of the University of Kansas Distinguished Professors Committee
2006-2009	Member of the KU Faculty Senate Research Committee
2006	Member of the International Program Committee of the 7th IFAC Symposium on Advances in Control Education, Madrid, Spain, June 21-23
2006	Co-organizer and Co-chair of the IFAC Workshop on "Power, Beauty and Excitement of Control" for Spanish High School Teachers and Students and College Students, held at the 7th IFAC Symposium on Advances in Control Education, in Madrid, Spain in June (about 150 participants)
2006	Organizer and Chair of the Panel Session on Control Engineering Education Initiatives, at the ACC in June, Minneapolis, Minnesota (100 participants)
2006	Organizer and Chair of the Panel Session, "Math, Science and Technology in Control Systems Education" - Part II, American Automatic Control, Minneapolis, Minnesota, June 14-16
2006	Member of the International Program Committee of the 9th IFAC Symposium on Automated System Based on Human Skill and Knowledge, Nancy, France, 22-24 May
2005	Member of the International Program Committee of the International Conference on Automatic Control and System Engineering, Cairo, Egypt, 19-21 December
2005	Organizer and Chair of the Invited Session, "Recent Advances in Stochastic Systems and Control," 44th IEEE Conference on Decision and Control and European Control Conference, ECC'05, Seville, Spain, December 12-15
2005	Organizer and Chair of the Invited Session, "Stochastic Systems: Estimation, Identification, Control," 44th IEEE Conference on Decision and Control and European Control Conference, ECC'05, Seville, Spain, December 12-15
2005	Organizer and Chair of the Session for IEEE CSS Women in Control, "Making Research Breakthroughs and Breaking Glass Ceilings: The Communication Challenges of Women in Higher Education," 44th IEEE Conference on Decision and Control and European Control Conference, ECC'05, Seville, December 12- 15

Page 18	Pasik-Duncan Vita
2005	Organizer and Moderator of the Panel Session, "Math, Science and Technology in Control Systems Education," 44th IEEE Conference on Decision and Control and European Control Conference, ECC'05, Seville, Spain, December 12-15
2005	Member of the International Program Committee of the Stochastic Calculus and its Applications to Quantitative Finance and Electrical Engineering Symposium, Haskayne School of Business, Calgary, Canada, 24th-27 July
2005	Co-organizer and Co-chair of the Workshop for Czech High School Students and Teachers at the World Congress of the International Federation of Automatic Control, Prague, Czech Republic, July 2
2005	Co-organizer and Co-chair of the Session for the IEEE CSS Women in Control on "Life and Careers Internationally, Similarities and Differences"
2005	Organizer and Chair of the Workshop for Cyprus Students on "Power, Beauty and Excitement of Control," Joint IEEE International Symposium on Intelligent Control and Mediterranean Conference on Control and Automation, Limassol, Cyprus, June 27
2005	Member of the International Program Committee of the International Conference on Control Problems and Applications (Technology, Industry, Economy), Minsk, Republic of Belarus, May
2005	Member of the International Program Committee of the IEEE Conference on Control, June, Cyprus
2004	Beginning and Continuing Mentoring and Assisting in Graduates and Undergraduates with K-12 (GUK12) Partnership Programs in Math, Science and Engineering for KU, other universities, groups and organizations
2004	Chair of the AWM Travel and Mentoring Grant Selection Committee
2004	Chair of the Educational Committee for American Association of University Women, Lawrence, Kansas
2004	Chair of the Control Education Committee for the American Automatic Control Council
2004	International Program Committee Member for the 7th International Association of Science and Technology for Development International Conference on Control and Applications, Cancun, Mexico, May
2004	Member of the Editorial Board for the International Journal of Statistics and Systems
2004	Member of the International Program Committee of the 9th Symposium IFAC on "Automated Systems based on Human Skill and Knowledge", 22-24 May 2006, Nancy, France and IFAC INCOM <sup>1</sup> 06 "Information Control Problems in Manufacturing," Saint-Etienne, France, 17-19 May
2003-2004	Program Committee Member of the 9th and 10th IEEE International Conferences on Methods and Models in Automation and Robotics, Miedzyzdroje, Poland
2003	KU College Caldwell Sabatini Search Committee

2003-Present KU AWM Student Chapter, Founder and Advisor.

- 2003 Program Committee Member of the 42nd IEEE Conference on Decision and Control, Hawaii, December
- 2003 Program Committee Member of the 2004 American Control Conference, Boston, June
- **2003** Member of the Selection Committee for Travel, Mentoring and Collaborative Grants for the Association for Women in Mathematics
- 2003 Organizer and Chair of the NSF Workshop for 300 Middle and High School Teachers and Students on "Ideas and Technology of Control Systems," December, Maui Hawaii (300 students and 20 teachers)
- 2003 Organizer and Chair of the NSF Workshop for Women in Control on "After Graduation: Women in Control Taking a Leadership Role," December, Maui, Hawaii (80 participants)
- **2003** Organizer of the 2nd Workshop for High School Teachers of Math and Science at the ACC in Denver held in June (50 teachers)
- 2003 Organizer of the Workshop for High School Students held at the CDC in Hawaii in December
- 2002-2003 A panelist "A Word of Wisdom" for parents of high school students at KU during Senior Days
- 2002 Editor of the Proceedings of the Workshop on Stochastic Theory and Control held at the University of Kansas in 2001
- 2002 Co-chair of the IFAC Control Education Committee
- 2002 Organizer of the Control Awareness Days Workshop for High School Students at the CDC in Las Vegas (200 participants)
- 2002 Chair of IEEE CSS Technical Committee on Control Education
- 2002 Co-organizer of the session "Teaching in International Culture" at the 2002 Summit on Teaching Excellence, KU, August
- **2002** Program Committee Member of the Conference on Control and Applications, Glasgow, United Kingdom, September
- 2002 Co-chair of the IFAC Control Education Committee
- 2001 Organizer of the Workshop for High School Students and Teachers in Radom, Poland held in September (200 participants)
- 2001 Organizer of the NSF International Workshop on Stochastic Theory and Control with participation of the High School Teachers, University of Kansas, October 2001 (5 teachers)
- 2001 Organizer of the International Workshop on Stochastic Theory and Control, University of Kansas, October

2001	Member of the Louise Hay Award Selection Committee
2001-2003	CDC Conference Control Educational Activities Chair
2001	Member of the Organizing Committee of the AMS-SIAM Symposium on Mathematical Finance to be held in 2003
2000-2002	Chair of the IEEE/CSS Standing Committee on International Affairs
2000	The Leader of the Control Systems Delegation to the People <sup>1</sup> s Republic of China
2000	Member of the Editorial Board of the Communications in Information and Systems Journal
2000	Organizer of Two Invited Sessions at the 39th IEEE/CSS CDC
2000	Member of the Program Committee of the 39th CDC
2000	Member of the Program Committee of the 2001 IFAC Workshop on Identification
2000-Present	Member of the IFAC Technical Committee on Identification
2000-Present	Member of the IFAC Technical Committee on Stochastic Systems
2000	Member of the Program Committee of the 2001 IFAC Workshop on Identification
2000	Member of the KU Committee on Undergraduate Studies and Advising
2000	Member of the KU Mathematics Department Long Range Planning Committee
2000	Organizer of the Panel Session on Partnership in Math and Science Education between K-12 Teachers from local schools and KU Faculty of Math and Science, held at KU in April (100 participants)
2000	Organizer and Chair of the Program Committee of the First NSF National Workshop for High School Teachers of Math and Science, held at the ACC in Chicago, in June (70 participants)
2000	Advisor of 8 graduate and 4 honors undergraduate students
1999-2000	Chair of the IEEE/CSS Task Force on Globalization
1999	The organizer of the invited session at the IEEE Control Decision Conference, Phoenix, AZ, December
1999	Chair of the Chair Hiring Committee
1999	Advisor of 10 graduate students and 5 honors undergraduates
1998-1999	Vice President of the IEEE-Control System Society (12,000 members)
1998	Member of the Program Committee of the IEEE Conference on Decision and Control

1998	The organizer of the invited session at the IEEE Control Decision Conference, Tampa, FL, December
1997-1999	SIAM Steering Committee
1997-1998	Member of the Program Committee of the
1998	Control and Distributed Parameter and Stochastic Systems, Hangzhou, China, June
1997	Elected member of the Board of Governors of the IEEE Control Systems Society
1997	Co-organizer of the International Conference on Stochastic Control and Nonlinear Filtering, University of Southern California, December
1997	Advisor of 6 Undergraduate Summer Research Projects
1997	The organizer of the invited session at the IEEE Control Decision Conference, San Diego, CA, December
1996	The organizer of the special session of the International Symposium on the Mathematical Theory of Networks and Systems Conference in St. Louis, June
1996	Local organizer of the SIAM Annual Meeting in Kansas City
1996	The organizer of the invited session at the IEEE Control Decision Conference, Kobe, Japan, December
1996	Member of the Program Committee of the 1998 American Control Conference
1995-1996	Member of AMS-SIAM 1996 Summer Symposium Organizing Committee
1995-1996	Member of the Organizing Committee of the 1996 SIAM Annual Meeting
1995-1996	Member of the Organizing Committee of the International Conference on Stochastic Differential Equations, Budapest, Hungary, August 1996
1995	Chair of the Program Committee of the Third SIAM Conference on Control held in St. Louis, April
1995	Associate Editor at Large of the IEEE Transactions on Automatic Control Editorial Board
1995	Associate Editor of the Journal of Intelligent Fuzzy Systems
1995	Member of the International Federation of Automatic Control (IFAC) Committee on the Financial Aid
1995	Member of the SIAM Prize Committee
1995	Organizer of 2 seminars on Math Technology in the Higher Education, Zakopane, Poland, September

1995	Organizer of the Math Technology Workshop for the Sunset Hill Elementary School students, KU, December
1994-1998	Chair of the IEEE Standing Committee on "Women in Control"
1994-1997	Member of the SIAM Master Program
1994-1996	Member of the Organizing Committee of the 1996 International Conference on Mathematical Theory of Networks and Systems
1994-1995	Member of the Program Committee of the 1995 Automatic Control Conference in Seattle, Washington, June 1995
1994-1995	Member of the Program Committee of the 1995 International Conference on Control and Information in Hong Kong, July 1995
1994	Editor of the column "Women in Control" in the IEEE Control and Systems Magazine
1994	Organizer of two Math Workshops for Sunset Hill Elementary Students, KU
1994	Member of the IEEE Conference Editorial Board
1994	Member of Ph.D. examination committee for Economics Department, Business School and Engineering School
1993-Present	Coordinator of the Mathematics Awareness Month/Outreach Program Aw
1993-1998	Chair of the IEEE Standing Committee on Assistance to At-Risk Scientists and Engineers
1993-1995	Member of the Organizing Committee of SIAM Activity Group on Control and Systems Theory Meeting held in St. Louis, April 1995
1993-1994	Program Director of the Society for SIAM Activity Group on Control and Systems Theory
1993-1994	Member of the Organizing Committee of 1994 Annual Meeting of SIAM in San Diego, July 1994
1993-1994	Member of the Program Committee of the 33rd IEEE Conference on Decision and Control, Orlando, Florida, December 1994
1993-1994	College Faculty Election Committee 1993 Organizer of two Math Workshops for Sunset Hill Elementary Students, KU
1993	University General Research Fund Committee
1992-1995	College Chairpersons Review Committee
1992-1993	Organizer of the Special Session at four International Conferences
1992	Organizer of the Math Workshop for Sunset Hill Elementary Students, KU

- **1992** Co-Editor of Proc. of International Workshop "Stochastic Theory-Adaptive Control," Lawrence, KS, September
- 1992 Advisor of the Undergraduate Student's Project
- 1992 Associate Editor of the Ulam Quarterly 1991-95 Department's Hiring Committee
- 1991-1994 College Graduate Studies Committee
- **1991** Co-Organizer of International Workshop on "Stochastic Theory-Adaptive Control" at KU sponsored by NSF and KU
- 1991 Advisor of Ph.D. students
- 1991 Advisor of Master's Research Components
- 1990-Present Chair of the Stochastic Adaptive Control Seminar
- **1990-1996** Evaluation of Teaching Committee KU (Math Department)
- 1990-1995 Associate Editor of IEEE Transactions on Automatic Control
- **1990-1991** Appointed Member of the Board of Governors of the Institute of Electrical and Electronics Engineers Control Systems Society
- 1990-Present Stochastic Adaptive Control Seminar at KU, Chair
- **1989** Educational Committee KU (Math Department)
- **1988-1990** Co-organizer of the Special Session at the IEEE Conference on Control and Decision
- **1988** USA Coordinator of Polish Mathematicians
- **1980-1983** Director of the Center of Applied Mathematics of the Polish Mathematical Society
- **1979** Organizer of the National Conference on Education of Mathematics at Economic Universities
- **1973-1980** President of the Warsaw School of Economics of the Polish Mathematical Society and Vice President of Warsaw Chapter of the Polish Mathematical Society

#### **PROFESSIONAL AFFILIATIONS**

- Current IEEE Control Systems Society Women in Control Advisory Board and Nominating Committee Member, Deputy Chair of the Technical Committee on Control Education
- Current IEEE Society for Social Implications of Technology: elected member of the Board of Governors
- 2010 Chair, AACC Technical Committee on Education

- 2006 IEEE Women in Engineering
- 2003 American Association of University Women
- 2002 Phi Beta Delta, Honor Society for International Scholars
- 1996 The Kansas Association of Teachers of Mathematics
- 1992 American Statistical Association
- **1990** The Institute of Electrical and Electronics Engineers Control Systems Society
- 1989 The Mathematical Association of America
- **1989** Society for Industrial and Applied Mathematics
- 1988 American Mathematical Society
- **1987** Association for Women in Mathematics
- 1985 Sigma Chi
- 1980 Bernoulli Society
- 1972 Polish Mathematical Society (Vice President of Warsaw Chapter, 1972-82)

# LECTURE AND SYMPOSIA INVITATIONS

- Some Linear Quadratic Control Problems for Bilinear Evolution Equations Driven by Gauss - Volterra Processes - Stochastic Analysis and its Applications, Bedlewo, Poland, May 29 - June 3, 2017
- 2. Stochastic Adaptive Control, a Field that Spans Science, Technology, Engineering and Mathematics, the Chief Guest, WIECON, Pune, India, December 2016
- 3. Why do I care about giving back Keynote Speaker, WIE Congress in Canada, September 2016
- 4. Integrating Research and Teaching Inaugural Talk at the International Competition SS12 Education through Innovation, Coimbatore, India, September, 2016
- 5. Stochastic Adaptive Control and Innovative Teaching, Pune, India, September 2016
- IFAC Workshop on Control of Transmission and Distribution Smart Grids CTDSG'15 -Plenary Speaker at the Women Involvement Panel Discussion, October 12-13, 2016, Prague, Czech Republic
- SMC 2016 IEEE International Conference on Systems, Man, and Cybernetics Plenary Speaker at the Women in Engineering Workshop, October 9-12, 2016, Budapest, Hungary
- 8. The IEEE SS12 Age of Innovation: SS12 International Project Competition: Enhancing the Quality of Life through Innovation Inauguration Address, Plenary Talk, and Judge in the Competition of the Finalists, September 26-27, 2016, Coimbatore, India

- 9. The 2016 IEEE Women in Engineering International Summit Welcome Remarks and Plenary Talk, September 23-24, 2016, Pune, India
- 10. The 2016 IEEE Canada Congress and Meetings Plenary Speaker at the 2016 Canada Women in Engineering Congress, September 17-18, 2016, Toronto, CA
- 11. 2016 CDC Invited Session Proposal with 7 papers (under review)
- 12. B. Pasik-Duncan, Dynamical Systems and Applications IV, (plenary speaker), 16-18 June 2016, Institute of Mathematics, Lodz Institute of Technology, Lodz, Poland.
- B. Pasik-Duncan, Panelist in Panel Session at the First Workshop on Integrating Research and Teaching, The IFAC Advances in Control Education Symposium, 1-3 June, Bratislava, Slovakia.
- 14. B.Pasik-Duncan, Stochastic Adaptive Control of Markov Chains Talk Dedicated to Petr Mandl, Charles University, May, 2016, Prague, Czech Republic.
- 15. B. Pasik-Duncan, Thirty Five Years Ago System Identification and Estimation, Hungarian Academy of Science, May, 2016, Budapest, Hungary.
- 16. B. Pasik-Duncan, Thirty Five Years Later On Stochastic Adaptive Control, Institute Of Mathematics, Polish Academy of Science, May, 2016, Warsaw, Poland.
- 17. B. Pasik-Duncan, Keynote Speaker for the Instrumentation & Measurement Conference, 25-28 May 2016, Taiwan.
- 18. B. Pasik-Duncan, Recent Advances in Stochastic Adaptive Control, Colloquium, April 2016, Department of Mathematics, University at Buffalo, SUNY.
- 19. B. Pasik-Duncan, Some stochastic differential games with state dependent noise, IEEE Conf. Decision and Control, Dec. 2015, Osaka, Japan.
- 20. B. Pasik-Duncan, Control of Linear Systems with Exponential Cost, International Congress of Industrial and Applied Mathematics (ICIAM), August, 2015, Beijing, China.
- B. Pasik-Duncan, Control of linear stochastic systems with state dependent noise, First IFAC Conf. on Modelling, Identification and Control of Nonlinear Systems, St. Petersburg, Russia, June 2015.
- 22. B. Pasik-Duncan, Discrete Time Linear Exponential Quadratic Gaussian Control, Mathematical International Workshop on Cybernetics: Hybrid, Stochastic and Decentralized Systems, Carleton University, Ottawa, 28-29 May, 2015.
- 23. B. Pasik-Duncan, Control of Linear Stochastic Systems, September 2015, Zakopane, Poland.
- Pasik-Duncan, B, "Fifty Years Later Reflections from the Classroom of the First Year Study of Mathematics at Warsaw University," 2015 Joint Mathematics Meetings, San Antonio, TX. (January 10, 2015 - January 13, 2015).
- 25. 2015 SIAM CT15 Two Mini-Symposia Proposals (Peer Reviewed)
- 26. 2014 and 2015 IEEE Control Decision Conference (CDC) Invited Sessions Proposals (Peer Reviewed with an acceptance rate lower than 25%): a. "New Developments in Stochastic Systems, Control and Their Applications" (with Maria Prandini, Italy) b. "New Developments in System Identification and Estimation " (with Lennart Ljung, Sweden)

- 27. B. Pasik-Duncan, Some stochastic differential games in spheres, Math. Theory of Networks and Systems, July 2014, Groningen, The Netherlands.
- 28. B. Pasik-Duncan, Linear-quadratic control with general noise processes, Proc. 53rd Conf. Decision Control, Dec. 2014, Los Angeles.
- 29. B. Pasik-Duncan, Some results on optimal control for a partially observed linear stochastic system with an exponential quadratic cost, IFAC World Congress, Aug. 2014, Cape Town, South Africa.
- 30. Solvability for Stochastic Control Problems with an Arbitrary Noise Process (with T. E. Duncan), University of Michigan, 24 October, 2013
- Solvability for Stochastic Control Problems with an Arbitrary Noise Process (with T. E. Duncan), 26th IFIP TC7 Conference on System Modeling and Optimization, Klagenfurt, Austria, 9-13 September, 2013
- 32. Invited to Banach Center Conference Advances in Mathematics of Finance, Warsaw University, Warsaw, Poland, June 2013
- 33. 30 years later: Discrete Time Linear Quadratic Control with Arbitrary Correlated Noise, International Banach Center Conference on Stochastic Analysis and Control, 50 Years of Scientific Activities of Professor Jerzy Zabczyk, Bedlewo, Poland, 5-10 May, 2013
- Stochastic Methods and Models for Autonomy and Data-to-Decision (with T. E. Duncan), Data to Decision & Autonomy Workshop, Defense Science Institute - Creating Defense Science Research Networks For Australia, Melbourne, Australia, 9-10 July, 2012
- Linear exponential quadratic gaussian control for stochastic partial differential equations (with T. E. Duncan), 20th International Symposium on Mathematical Theory of Networks and Systems (MTNS 2012), Melbourne, Australia, 9-13 July, 2012
- Control of some partially observed linear stochastic systems with fractional Brownian motions (with T. E. Duncan), 50th IEEE Conference on Decision and Control, Orlando, FI, 12-15 December, 2011
- 37. Control and Adaptive Control, Mathematics Department, University of Wisconsin, Milwaukee, WI, October 2011
- 38. On the Control of Completely and Some Partially Observed Stochastic Systems with Fractional brownian Motions (with T. E. Duncan), Invited talk in Special Session on Stochastic Analysis, Control, Computation, and Applications at the Markov and Semi-Markov Processes and Related Fields Conference, Porto Carras Grand Resort, Chalkidiki, Greece, September 20-23, 2011
- 39. Challenges and Opportunities in Teaching and Research, Plenary talk at the 6th Ph.D Students and Young Scientists Conference, Warsaw, Poland, 19-22 September, 2011
- Linear-quadratic control for some stochastic equations in a Hilbert space with a fractional Brownian motion, Invited talk in Mini-symposium on Stochastic Modeling and Control at the 25th IFIP TC7 Conference on System Modeling and Optimization, Berlin, Germany, 12-16 September, 2011
- Control of Some Linear Stochastic Equations in a Hilbert Space Driven by a Fractional Brownian Motion with a Quadratic Cost, Invited talk at the XL Conference on Applications of Mathematics (Konferencja Zastosowan Matematyki), Zakopane, Poland, 30 August - 6 September, 2011

- Control of some linear equations in a Hilbert space with fractional Brownian motions (with T. E. Duncan and B. Maslowski), 18th IFAC World Congress, Milano, Italy, 28 August - 2 September 2011
- Control in Infinite versus Finite Dimensional Stochastic Systems with Fractional Brownian Motion (with T. E. Duncan and B. Maslowski), Invited talk in Mini-Symposium on Stochastic Methods in Identification and Control, 2011 SIAM Conference on Control and Its Applications (CT11), Baltimore, Maryland, July 25-27, 2011
- Identification and Adaptive Control of Branching Processes (with Y. Zachariou), Invited talk in Mini-Symposium on Stochastic Methods in Identification and Control, 2011 SIAM Conference on Control and Its Applications (CT11), Baltimore, Maryland, July 25-27, 2011
- Stochastic linear-quadratic control for systems with a fractional Brownian motion (with T. E. Duncan), 49th IEEE Conference on Decision and Control, Atlanta, GA, 15-17 December, 2010
- Linear-quadratic control for stochastic equations in a Hilbert space with a fractional Brownian motion, XXXIX Conference on Applications of Mathematics (KZM 39), Zakopane, Poland, 7-14 September, 2010
- Control of linear systems with fractional Brownian motions (with T. E. Duncan), 19th International Symposium on Mathematical Theory of Networks and Systems (MTNS), Budapest, Hungary, 5-9 July, 2010
- 48. On Stochastic Adaptive Control, Mathematics Department, Fudan University, Shanghai, China, December, 2009
- 49. Control of Some Linear Stochastic Systems with a Fractional Brownian Motion (with T. E. Duncan), The Combined 48<sup>th</sup> IEEE Conference on Decision and Control and 28<sup>th</sup> Chinese Control Conference, Shanghai, China, December 16-18
- The Beauty of a Field that Spans Science and Engineering, Plenary talk at the 4th International Ph.D. Students and Young Scientists Conference, Warsaw, Poland, September, 2009
- Stochastic Equations Driven by Cylindrical Fractional Brownian Motion, XXXIX Conference on Applications of Mathematics (KZM 38), Zakopane, Poland, September, 2009
- Growth Optimal Portfolio Under Proportional Transaction Costs with Obligatory Differsification (with T. E. Duncan and L. Stettner), Invited talk in Mini-Symposium on Financial Modeling and Stochastic Control, 2009 SIAM Conference on Control and Its Applications (CT09), Denver, Colorado, July 6-8, 2009
- 53. Semilinear stochastic equations in a Hilbert space with a fractional Brownian motion, University of California, San Diego, CA, January 31, 2009
- 54. From the Brain to the Stock Market (with Dominique Duncan), Workshop for High School Students and Teachers, July 11, 2008 at the IFAC Congress in Seoul, Korea.
- 55. Parameter continuity of the ergodic cost for a growth optimal portfolio with proportional transaction costs (with T. E. Duncan and L. Stettner), Conference on Decision and Control (CDC), December 2008, in Cancun, Mexico
- Growth optimal portfolio under proportional transaction costs with obligatory diversification (with T. E. Duncan and L. Stettner), CDC, December 2008, Cancun, Mexico

- 57. A linear control system model for risk reserves (with T. E. Duncan and P. Mandl), American Control Conference, June 2008, Seattle
- 58. Estimation and mutual information (with T. E. Duncan), CDC, December 2007, New Orleans
- 59. Fudan University, China, May 2007
- 60. Stochastic Processes and Applications to Finance, Communication Networks and Neuroscience, Indian Institute of Science, Bangalore, 16-21 July 2007
- 61. Advances in Mathematics of Finance, Bedlewo, Poland, 30 April 5 May 2007
- 62. Stochastic Processes: Theory and Applications, Bressanone, Italy, 16-20 July 2007
- 63. 23rd IFIP TC7 Conference on System Modeling and Optimization, Cracow, Poland, 23-27 July 2007
- 64. Mechanical and Aerospace Engineering, University of California, San Diego, 30 January 2006.
- 65. Two Invited talks at IEEE Conference on Decision and Control, San Diego, December, 2006
- (with D. Duncan) "Random Walk Around Some Stochastic Control Problems in Telecommunications, Finance and Medicine", IFAC Workshop on Advances in Control Education, Madrid, Spain, June, 2006
- Panelist in the Panel Session on "Rethinking Control Education in the Modern World", IFAC Workshop on Advances in Control Education, Madrid, Spain, June, 2006
- 68. "Conversations with Dr. B. Pasik-Duncan", KU Student Success, Professional Development Day, KU, October 11, 2006
- 69. "Conference on Stochastic Control and Numerics," Milwaukee, Wisconsin, September 15-17, 2005. (Invited Talk)
- 70. 22nd IFIP TC 7 and 9 Conference on System Modeling and Optimization, Turin, Italy, 18-22 July 2005. (Two Invited Talks)
- 71. Panel session on "Future Directions of Control," IFAC Congress, Prague, Czech Republic, July 6, 2005. (Invited Panelist)
- 72. Workshop for Students on "Beauty and Power of Control," IFAC Congress, Prague, Czech Republic, July 3, 2005. (Invited Talk)
- 73. International Conference on Control Problems and Applications (Technology, Industry, Economy), Minsk, Republic of Belarus, May 16-20, 2005. (Plenary Talk)
- 74. Workshop on "Intelligent Systems and the Control of Multivehicle Formations," Boston, May 13, 2005. (Invited Talks)
- 75. "Women in Math, Science and Engineering," October 2004, Hays Public Library, Hays, Kansas. (Invited Talk)
- 76. "Making Connections with Stochastic Modeling," Workshop on Stochastic Systems in Honor of Martin Clark, September 10-11, 2004, London, United Kingdom. (Keynote

Address)

- 77. Series of Talks on "Integrating Research, Teaching and Learning, Control and Systems Theory as an illustrative example," at different Universities and High Schools in Poland.
- 78. 10th IEEE International Conference on Methods and Models in Automation and Robotics, Miedzyzdroje, Poland, August 2004.
- 79. "Successful Strategies in Academic Career," MAA Project NExT Workshop, August 13, 2004, Providence, Rhode Island. (Invited Address)
- 80. "Mathematics Education of Tomorrow," MATHFEST, Rhode Island, August 2004. (Plenary Talk)
- 81. The Third Congress on Nonlinear Analysis, Orlando, Florida, July 2004.
- 82. 42nd CDC in Maui, Hawaii, December 2003.
- 83. AMS SIAM Summer Workshop on Mathematics of Finance, June 2003, Utah. (Plenary Talk)
- 84. 9th IEEE International Conference on Methods and Models in Automation and Robotics, Miedzyzdroje, Poland, 2003. (Plenary Talk)
- 85. XXXI Conference on Applied Mathematics, Zakopane, Poland, September 2002.
- 86. 15th IFAC World Congress, Barcelona, Spain, July 2002.
- 87. 10th IEEE Mediterranean Conference on Control and Automation, Lisbon, Portugal, July 2002.
- 88. Conference on Stochastic Control and its Applications, Bedlewo, Poland, June 2002.
- 89. American Control Conference, Anchorage, Alaska, May 2002.
- 90. 40th Control and Decision Conference, Orlando, Florida, December 2001.
- 91. Workshop on Careers in Industry, IAM, Minneapolis, Minnesota.
- 92. XXX Conference on Applied Mathematics, Zakopane, Poland, September 2001.
- 93. The IFAC Workshop on Adaptive Control, Combo, Italy, August 2001.
- 94. International Workshop on Mathematics of Finance, Poland, June 2001.
- 95. International Conference on Mathematical Finance, Shanghai, China, May 2001.
- 96. The Institute of Mathematics of Polish Academy of Sciences, Warsaw, Poland, March 2001.
- 97. Blueprints 2001, University of Kansas, March 2001.
- 98. University of Kansas Slavic Department, February 2001.
- 99. 39th Control and Decision Conference, Sydney, Australia, December 2000.
- 100. Optimization Days, May 2000, Montreal, Canada.
- 101. International Conference on Applied Mathematics, September 2000, Zakopane,

Poland.

- 102. The Third World Congress of Nonlinear Analysts, July 2000, Catarina, Italy.
- 103. Mathematical Theory of Networks and Systems, June 2000, Perpignan, France.
- 104. International Conference on Applied Mathematics, Sept. 1999, Zakopane, Poland. (1 hour talk)
- 105. XX International Seminar on Stability Problems for Stochastic Models Lublin-Naleczow, September 1999.
- 106. International Conference on Operations Research, July, Germany. (1 hour talk)
- 107. VII Mediterranean Conference on Control and Applications, June 1999, Israel.
- 108. International Conference on Probability Theory, Sept. 1999, Naleczow, Poland. (1 hour Plenary Talk)
- 109. Fourth International Joint Meeting of the AMS and the Society Math. Mexico, Texas, May 1999. (1 hour talk)
- 110. The NSF Workshop on Control Education, Urbana, Illinois, 2-3 October 1998.
- 111. Conference on Decision and Control, 16-18 December 1998, Tampa, Florida.
- 112. IFAC Workshops on Signal Processing, Glasgow, Scotland, 25-27 August. (1 hour talk)
- 113. International Conference on Applied Mathematics, 27 Sept.-2 Oct. 1998, Zakopane Poland. (1 hour talk)
- 114. Stochastic Analysis Meeting, 36th Annual Allerton Conf. Communication Control and Computing, 23-25 September 1998.
- 115. Mathematical Theory of Networks and Systems, 6-10 July 1998, Padova, Italy.
- 116. Conference on Control of Distributed Parameter and Stochastic Systems, 19-22 June 1998, Hangzhou, China. (1 hour talk)
- 117. Osaka University, Japan, 15-17 June 1998. (1 hour talk)
- 118. "A Woman in Control," 1997 Industry Society of Women Engineers Meeting, University of Kansas, September 1997. (Keynote Speaker)
- 119. XXVI Conference on Applications of Mathematics, Zakopane, Poland, September 1997. (Plenary Talk)
- 120. The 3rd Electrical Engineering Conference CIE97, Mexico City, Mexico, September 1997. (Plenary Talk)
- 121. Institute of Mathematics of Polish Academy of Sciences, Warsaw, Poland, July 1997.
- 122. The 5th IEEE Mediterranean Conference on Control and Automation, Paphos-Cypress, July 1997.
- 123. SIAM's 45th Anniversary Meeting, Stanford, California, July 1997.
- 124. INFORMS Conference, San Diego, May 1997.

- 125. University of Michigan, Ann Arbor Engineering School, April 1997.
- 126. Kemper Symposium, "Teaching and the Real World," March 1997.
- 127. Wright State University, Mathematics Department, February 1997.
- 128. University of Southern California Center for Applied Mathematics and Mathematics Department, February 1997.
- 129. The American Mathematical Society Meeting, San Diego, January 1997. (Panelist in the panel session of the Joint Policy Board for Mathematics)
- 130. The 35th CDC Conference in Kobe, Japan, December 1996. (Invited Talk and Invited Session)
- 131. Symposium on Topics in Stochastic Control, Osaka, Japan, December 1996. (Plenary Talk)
- 132. The XXV Conference on Applications of Mathematics, Zakopane, Poland, September 1996. (Plenary Talk)
- 133. "From a Polish Space to the Land of Oz," AWM Workshop, Kansas City, July 22, 1996. (Keynote Speaker)
- 134. AMS-SIAM Summer 1996 Symposium. (Plenary Speaker)
- 135. Third IEEE Mediterranean Symposium on New Directions in Control and Automation, Limassol, Cyprus, 11-13 July 1995.
- 136. The IFIP Conference on Distributed Parameter Systems, Warsaw, Poland, 17-21 July 1995.
- 137. International Conference on Control and Information, Hong Kong, 5-9 June 1995.
- 138. 3rd SIAM Conference on Control and its Applications, St. Louis, April 1995.
- Banach Center Symposium on Stochastic Control, Warsaw, 13-25 March 1995. (Plenary Talk)
- 140. University of Kentucky, Mathematics Department, February 1995.
- 141. 33rd IEEE Conference on Decision and Control, Orlando, 14-16 December 1994.
- 142. International Conference on Statistics for the 100th Anniversary of J. Neyman's Birth, 25-26 November 1994, Jachranka, Poland.
- 143. Institute of Mathematics, Warsaw, November 1994.
- 144. Charles University, Prague, Czech Republic, November 1994.
- 145. University of Padova, Padova, Italy, 20-21 October 1994.
- 146. Institut National de Recherche en Informatique et Automatique, Rocquencourt, October 1994.
- 147. 23rd Conference on Applications of Mathematics, Zakopane, Poland, September 1994. (Plenary Talk)

- 148. Fifth Annual Internatinal Ulam Mathematics Conference and Von-Neumann Symposium, Palm Beach Atlantic College, March, 1994. (Featured Speaker)
- 149. 22nd Conference on Applications of Mathematics Zakopane, Poland, September 1993. (Plenary Talk)
- 150. The International Workshop on "Control Theory and its Applications," Adelaide, Australia, July 1993. (Plenary Talk)
- 151. Institute of Mathematics, Polish Academy of Sciences, Warsaw, June 1993.
- 152. The Workshop on "Adaptive Control, Filtering and Signal Processing," Institute for Mathematics and Its Applications, Minneapolis, Minnesota, April 1993. (Plenary Talk)
- 153. Fourth Annual Ulam Conference, West Palm Beach, Florida, March 1993. (Plenary Talk)
- 154. Il Workshop on Adaptive Control, Cancun, Mexico, 9-11 December 1992.
- 155. Stochastic Control Month of the Fall 1992 Probability Workshop, Montreal, Canada, November, 1992. (Plenary Talk)
- 156. SIAM Conference on Control and It's Applications, Minneapolis, Minnesota, 17-19 September, 1992.
- 157. Institute of Mathematics, Polish Academy of Sciences, Warsaw, July 1992.
- 158. Department of Probability and Statistics, Charles University, Prague, Czechoslovakia, July 1992.
- 159. Boston University-MIT-Harvard, June 1992.
- 160. Conference on Stochastic Partial Differential Equations CIRM, Marseille-Luminy, France, 12-18 April, 1992. (Plenary Talk)
- 161. Institute National de Recherche en Informatique et en Automatique-INRIA, France, April 1992.
- 162. Department of Probability and Statistics, Charles University, Prague, Czechoslovakia, April 1992.
- 163. Third Annual Ulam Mathematics Conference, West Palm Beach, 19-20 March 1992.
- 164. 16th Symposium on Operations Research, Trier, Germany, September 1991. (Plenary Talk)
- 165. 15th IFIP Conference on System Modelling and Optimization Zurich, Switzerland, September 1991.
- 166. Institute of Mathematics, Polish Academy of Sciences, Warsaw, Poland, July 1991.
- 167. Department of Probability and Statistics, Charles University, Prague, Czechoslovakia, July 1991.
- 168. Institute National de Recherche en Informatique et en Automatique-INRIA, France, June 1991.
- 169. Workshop on Applied Stochastic Analysis, Rutgers University, New Brunswick, New Jersey, April 1991.

- 170. Ulam Conference, Palm Beach, Florida, April 1991.
- 171. Department of Probability and Statistics, Charles University, Prague, Czechoslovakia, July 1990.
- 172. Workshop on Adaptive Control, Banach International Mathematical Center, Warsaw, Poland, 4-5 July 1990. (Plenary Talk)
- 173. Institut National de Recherche en Informatique et en Automatique-INRIA France, June 1990.
- 174. Ulam Quarterly and Algebraic Geometry Conference, Palm Beach, Florida, February 1990.
- 175. Twenty-eighth Conference on Decision and Control, Tampa, Florida, 1989.
- 176. Institute of Mathematics, PAN, Warsaw, Poland, July 1989.
- 177. Charles University, Prague, Czechoslovakia, June 1989.
- 178. Institut National de Recherche en Informatique et en Automatique-INRIA, France, June 1989.
- 179. Twenty-seventh Conference on Decision and Control, Austin, Texas, 1988.
- 180. The American Mathematical Society (AMS) Regional Meeting, Lawrence, Kansas, October 1988.
- 181. 1988 IFIP Conference on Stochastic Systems and Optimization, Jablonna, Poland,182. September 1988.
- 183. Institut National de Recherche en Informatique et en Automatique-INRIA, France, June 1988.
- 184. Fourth Bad Honnef Conference on Stochastic Differential Systems, Bad Honnef, West Germany, June 1988.
- 185. Institute of Mathematics, Polish Academy of Sciences, Warsaw, Poland,
- 186. June 1988.
- 187. Twenty-sixth Conference on Decision and Control, Los Angeles, 1987.
- 188. Institute of Mathematics, Polish Academy of Sciences, Warsaw, Poland, July 1987.
- 189. Institute of Mathematics, Polish Academy of Sciences, Warsaw, Poland, June 1986.
- 190. First Hungarian-Polish School on Adaptive Control, Banach International Center of Mathematics, Poland, 1984.
- 191. Institute of Mathematics, Polish Academy of Sciences, Warsaw, Poland, Fall 1983. (series of lectures on adaptive control)
- 192. Twelfth National Conference on Applied Mathematics (Forum Lecture), Poland, 1983.
- 193. Computer and Automation Institute, Hungarian Academy of Sciences, Budapest, Hungary, June 1982.

- 194. National Conference on Education of Mathematics at Economic Universities. (Invited Speaker at annual meetings, Poland, 1975-80, Organizer 1979)
- 195. Czech-Polish-Russian Meeting of Econometricians, Poland, 1978.

### OTHER CONFERENCES AND PRESENTATIONS

- 2017 IFAC World Congress, Toulouse, France, July 9 July 14 Panel Session: Preparing Tomorrow's Scientists and Engineers for the Challenges of the 21st Century Panel Session: Your Research Sharing through Outreach
- 2. 2015 American Control Conference, Chicago, II, July 5-7
- 3. 2014 American Control Conference, Portland, OR, June 4-6.
- 4. 2013 IEEE Conference on Decision and Control (CDC 2013), Florence, Italy, December 10-13.
- 5. 2013 UNESCO/IGU Workshop on Women in Engineering in Africa and the Arab States, Paris, France, December 10.
- 6. 2013 European Control Conference (EEC13), Zurich, Switzerland, July 17-19.
- 2013 SIAM Conference on Control and Its Applications (CT13), San Diego, CA, July 8-10.
- 8. 2013 American Control Conference, Washington, D.C., June 17-19.
- 9. 2012 IFAC Council & Related Meetings, Gifu, Japan, July 10-12.
  - a. IFAC Technical Board Meeting as the Chair of the Technical Committee on Control Education.
  - b. Publication Board Meeting as the Editor-in-Chief of the Control Resources Publications.
  - c. Awards Committee Meeting as the Chair of the IFAC Harold Chestnut Control Engineering Textbook Prize.
- 10. 2012 American Control Conference, Montreal, Canada, June.
- 11. Challenges in Geometry, Analysis and Computation: High Dimensional Synthesis, Yale University, New Haven, CT, June 4-6.
- 12. 2011 American Control Conference, San Francisco, California, July 2011
- 13. 2010 American Control Conference, Baltimore, Maryland, June 2010
- 14. 2009 American Control Conference, St. Louis, June 2009
- 15. 2008 American Control Conference, Seattle, Washington, June 2008
- 16. 2007 American Control Conference, New York, New York, July 2007
- 17. 2006 American Control Conference, Minneapolis, Minnesota, June 2006
- 18. 2005 Conference on Decision and Control / European Control Conference, Seville,

Spain, December 2005

- 19. IEEE International Symposium on Intelligent Control and Mediterranean Conference on Control and Automation, Limassol, Cyprus, June 2005
- 20. 2005 American Control Conference, Portland, Oregon, June 2005
- 21. 2004 American Control Conference, Boston, June
- 22. 2003 American Control Conference, Denver, June
- 23. Workshop on Stochastic Theory and Control, University of Kansas, Lawrence, Kansas, October 2001
- 24. 2001 American Control Conference, Washington, D.C., June 2001
- 25. The First NSF Workshop for High School Teachers of Math and Science, Chicago, June 2000
- 26. 2000 American Control Conference, Chicago, June 2000
- 27. 38th CDC, December 1999, Phoenix, Arizona
- 28. IFAC World Congress, July 1999, Beijing, China
- 29. 1999 American Control Conference, San Diego, June 1999
- 30. 1998 American Control Conference, Philadelphia, June 1998
- 31. 1997 American Control Conference, Albuquerque, New Mexico, June 1997
- 32. Conference on Stochastic Differential and Differential Equations, Gyor, Hungary, 21-24 August 1996
- 33. 1995 SIAM Annual Meeting, October, Charlotte, North Carolina
- 34. 1994 SIAM Annual Meeting, July, San Diego, California
- 35. 1994 American Control Conference, June, Baltimore, Maryland
- 36. 32nd IEEE Conference on Decision and Control, San Antonio, Texas, December, 1993 (2 lectures and organizer of the session on "Stochastic Theory-Adaptive Control")
- 1993 World Congress of the International Federation of Automatic Control, Sydney, Australia, July 1993. (Invited organizer of the session on "Recent Advances in Stochastic Adaptive Control")
- 38. 1993 American Control Conference, San Francisco
- 39. 31st IEEE Conference on Decision and Control, Tucson, Arizona, December 1992 (Lecture and organizer of the session on "Stochastic Theory-Adaptive Control")
- SIAM Conference on Control and its Applications, Minneapolis, Minnesota, September 1992. (Organizer of the session on "Stochastic and Deterministic Adaptive Control of Distributed Parameter System")
- 41. 1992 American Control Conference, Chicago, Illinois, June, 1992
- 42. The 30th IEEE Conference on Decision and Control, Brighton, England,

December 1991

- 43. The 29th IEEE Conference on Decision and Control, Honolulu, December 1990
- 44. "Linear Algebra, Signals, Systems, Control" SIAM Conference, San Francisco, November 1990
- 45. 2nd World Congress of the Bernoulli Society for Mathematical Statistics and Probability, Uppsala, Sweden, 13-18 August 1990
- 46. Ninth International Conference, Analysis and Optimization of Systems, Antibes-Juan les Pins-France, 12-15 June 1990
- 47. 1990 American Control Conference, San Diego
- 48. Fourteenth European Meeting of Statisticians, Wroclaw, Poland, September 1981
- 49. Twelfth European Meeting of Statisticians, Varna, Bulgaria, September 1979
- 50. VI International Conference on Mathematical Statistics, Wisla, Poland, December 1978
- 51. Annual National Meetings of Polish Mathematical Society, Poland, 1972-82
- 52. Annual National Conference on Applied Mathematics, Poland, 1974-81

## PUBLICATIONS

### A.Mathematical – Journals, Peer Reviewed Proceedings and Research Monographs

- 1. Stochastic Systems, Wiley Encyclopedia of Electrical and Electronics Engineering, 2017 (to appear)
- Stochastic linear-quadratic control for some bilinear equations with stochastic coefficients and fractional Brownian motions (with T. Duncan), Proc. IEEE 4<sup>th</sup>-2017 Intern. Conf. on Control, Decision and Info. Technologies, Barcelona, 5-7 April 2017 (to appear).
- 3. Some multi-agent linear-quadratic stochastic differential games with fractional Brownian motions (with B. Pasik-Duncan), preprint.
- 4. A direct approach to linear-quadratic stochastic control (with T. Duncan), preprint.
- 5. Linear stochastic differential game with sate dependent noise (with T. Duncan), preprint.
- 6. Stochastic linear-quadratic control for bilinear evolution equations driven by Gauss-Volterra processes, (with T. Duncan and B. Maslowski ), preprint.
- 7. Solvable stochastic differential games in rank one compact symmetric spaces (with T. Duncan) To appear in Intern. J. Control.
- B. Pasik–Duncan, Stochastic Adaptive Control as a Field that Spans Science, Technology, Engineering and Mathematics (STEM), Chapter in Adaptive Control for Robotic Manipulators, CRC Press/Taylor & Francis Group, to appear.
- 9. J.A. Rossiter, B. Pasik-Duncan, S. Dormido, L.Vlacic, B.Jones and Richard Murray, Good Practice in Control Education, submitted for the European Journal of Engineering Education, 2016.

- 10. T. Duncan and B. Pasik-Duncan, Stochastic Differential Games with State Dependent Scalar Fractional Gaussian Noise and Quadratic Payoff (under review), Proc. 55th Conf. Decision Control, Dec. 2016, Las Vegas.
- 11. Pasik-Duncan, Editor-in-Chief (invited) of the Springer Volume on Women in Control Around the Globe in Leadership Roles, to be submitted for publication in September, 2016.
- Stochastic Adaptive Control Integrating Research and Teaching (with T. Duncan), Proc. 11<sup>th</sup> IFAC Symp. On Advances in Control Education, Bratislava, v.49 105-109, June, 2016.
- 13. T. E. Duncan and B. Pasik-Duncan, Explicit strategies for some linear and nonlinear stochastic differential games, J. Math. Engrg. Sci. Aerospace 7 (2016), 83-92.
- 14. T. E. Duncan and B. Pasik-Duncan, Some solvable stochastic differential games in SU(3), Commun. Info. Systems 1 (2016).
- 15. Stochastic adaptive control (with T. Duncan), Encyclopedia of Systems and Control, (eds. J. Baillieul and T. Samad), Springer-Verlag London 2015
- T. E. Duncan, B. Maslowski and B. Pasik-Duncan, Some ergodic control problems for linear stochastic equations in a Hilbert space with fractional Brownian motion, Banach Center Publ.105 (2015), 91-102.
- 17. T. E. Duncan and B. Pasik-Duncan, Some stochastic differential games with state dependent noise, Proc. IEEE Conf. Decision and Control, Dec. 2015, Osaka, Japan.
- 18. T. E. Duncan, J. Jakubowski and B. Pasik-Duncan, Stochastic volatility models with volatility driven by a fractional Brownian motion, Commun. Info. Sys. 15 (2015), 47-55.
- Pasik-Duncan, Editor of the Special Issue Dedicated in Honor of Wing-Shing Wong on the Occasion of His 60th Birthday, Communications in Information and Systems, Volume 15, 2015
- 20. C.E. Clifton and B. Pasik-Duncan, Identification of a Stochastic PageRank System, Proc. SIAM Conf. Control & Appl (CT15), Paris, France, 2015.
- T. E. Duncan and B. Pasik-Duncan, Control of linear stochastic systems with state dependent noise, Proc. First IFAC Conf. on Modelling, Identification and Control of Nonlinear Systems, St. Petersburg, Russia, June 2015
- 22. T. E. Duncan and B. Pasik-Duncan, Stochastic adaptive control, Chapter in Encyclopedia of Systems and Control, Springer, 2014.
- 23. T. E. Duncan and B. Pasik-Duncan, Linear-quadratic control with general noise processes, Proc. 53rd Conf. Decision Control, Dec. 2014, Los Angeles, 364-369
- T. E. Duncan and B. Pasik-Duncan, Some results on optimal control for a partially observed linear stochastic system with an exponential quadratic cost, Proc. IFAC World Congress, Aug. 2014
- 25. T. E. Duncan and B. Pasik-Duncan, Some stochastic differential games in spheres, Proc. Math. Theory of Networks and Systems, Groningen, Netherlands, July 2014, 2488-2492
- 26. A solvable stochastic differential game in the two-sphere (with T. E. Duncan), Proc. IEEE Conf. Decision and Control, Firenze, 2013, 7833-7837.

- 27. Ergodic problems for linear exponential quadratic Gaussian control and linear quadratic stochastic differential games (with T. E. Duncan), Proc. IEEE Conf. Decision and Control, Firenze, 2013, 2388-2392.
- 28. Linear-quadratic fractional Gaussian control (with T. E. Duncan), SIAM J. Control Optim. 51 (2013), 4604-4619.
- 29. Linear-exponential-quadratic Gaussian control (with T. E. Duncan), IEEE Trans. Autom. Control, 58 (2013) No 11, 2910 2911.
- 30. Discrete time linear quadratic control with arbitrary correlated noise (with T. E. Duncan) IEEE Trans. Autom. Control, 58 (2013) No 5, 1290 1293.
- A direct method for solving stochastic control problems (with T. E. Duncan), Communications in Information and Systems, 12 (2012 – special issue for H. F. Chen), 1-14.
- 32. A Stochastic Control Problem in the Two-Sphere (with T. E. Duncan), Proc. 2012 IEEE MSC, pp. 1441-1444, Dubrovnik, Croatia, October 3-5, 2012.
- 33. Editor of the 2012 Communications in Information and Systems (CIS) Special Volume on Complex Systems.
- 34. Some models of control with fractional Brownian motions (with T. E. Duncan), Proc. 9th IFAC Symp. Advances in Control Education, Nizhny, Russia, June 2012.
- 35. Linear-exponential-quadratic Gaussian control for stochastic equations in a Hilbert space (with T. E. Duncan), Dyn. Systems Applic. special issue, 21 (2012), 407-41.
- Linear-exponential-quadratic Gaussian control for stochastic partial differential equations (with T. E. Duncan), Proc. 20th Symp. Math. Theory Networks and Systems, Melbourne, Australia, July 2012.
- Linear-Quadratic control for stochastic equations in a Hilbert with a fractional Brownian motion, (with B. Maslowski and T. E. Duncan), SIAM J. Control Optim., 50 (2012), 507-533.
- Control of some linear stochastic systems in a Hilbert space with fractional Brownian motions (with T. E. Duncan and B. Maslowski), Proc. 16th Conf. on Methods and Models in Automation and Robotics, 107-110, Miedzyzdroje, Poland, 2011.
- On the Control of Completely and Partially Observed Stochastic Systems with Fractional Brownian Motion, Proc. 2011 Markov and Semi-Markov Processes and Related Fields (MSMPRF2011) Conference.
- Control of some partially observed linear stochastic systems with fractional Brownian motions, (with T. E. Duncan) Proc. 50th IEEE Conference on Decision and Control, 5035-5040, Orlando, 2011.
- Control of some linear equations in a Hilbert space with fractional Brownian motions (with T. E. Duncan and B. Maslowski), Proc. 18th IFAC World Congress, Milano, Italy, 2011, 3240-3244.
- Growth optimal portfolio under proportional transaction costs with obligatory diversification (with T. E. Duncan and L. Stettner), Appl. Math. Optim. 63 (2011), 107-132.
- 43. Stochastic linear-quadratic control for systems with a fractional Brownian motion, (with T. E. Duncan), Proc. 49th IEEE Conference on Decision and Control, Atlanta, GA, 2010,

6163-6168.

- 44. Control of linear systems with fractional Brownian motions (with T. E. Duncan), Proc. Math. Theory of Networks and Systems, 1545-1550, 2010, Budapest, Hungary
- Stochastic linear-quadratic control for systems with a fractional Brownian motion, (with T. E. Duncan), Proc. 49th IEEE Conference on Decision and Control, Atlanta, GA, 2010, 6163-6168.
- Control of some linear stochastic systems with a fractional Brownian Motion (with T. E. Duncan), Proc. 48th IEEE Conference on Decision and Control, Shanghai, China, 2009, 8518-8520.
- 47. Parameter continuity of the ergodic cost for a growth optimal portfolio with proportional transaction costs (with T. E. Duncan and L. Stettner), Proc. CDC'08, Cancun, Mexico.
- 48. Growth optimal portfolio under proportional transaction costs with obligatory diversification (with T. E. Duncan and L. Stettner), Proc. CDC'08, Cancun, Mexico.
- Solutions of linear and semilinear distributed parameter equations with a fractional Brownian motion (with T. E. Duncan and B. Maslowski), J. Adapt. Control Signal Proc., 2009, 23: 114-130.
- 50. Adaptive control of a scalar linear stochastic system with a fractional Brownian motion (with T. E. Duncan), Proc. IFAC World Congress, Seoul, 2008, 4096-4101.
- 51. A linear control system model for risk reserves (with T. E. Duncan and P. Mandl), Proc. American Control Conference, Seattle, 2008, 331-335.
- 52. Estimation and Mutual Information (with T. E. Duncan), Proc. 46th IEEE Conference on Decision and Control, New Orleans, 2007, 324-327.
- 53. Some solutions of semilinear stochastic equations in a Hilbert space with a fractional Brownian Motion (with T. E. Duncan and B. Maslowski), Proc. 45th IEEE Conference on Decision and Control, San Diego, 2006, 3077-3082.
- Linear stochastic equations in a Hilbert space with a fractional Brownian motion (with T. E. Duncan and B. Maslowski), Control Theory Applications in Financial Engineering and Manufacturing (H. Yan, G. Yin and Q. Zhang, eds), Springer (2006), 201-222.
- 55. Stochastic Control and Filtering, Guest Editor of the Special Volume with 4 issues: 6.3 and 6.4 (2006) and 7.1 and 7.2 (2007), Communications in Information and Systems Journal.
- 56. Semilinear stochastic equations in a Hilbert space with a fractional Brownian motion (with T. E. Duncan and B. Maslowski), SIAM J. Math. Analysis, 40 (2009), 2286-2315.
- 57. Some solutions of semilinear stochastic equations in a Hilbert space with a fractional Brownian motion (with T. E. Duncan and B. Maslowski), Proc.45-th IEEE Conference on Decision and Control, San Diego 2006, 3077-3082.
- Remarks on risk sensitive adaptive control of Markov processes (with T. E. Duncan and L. Stettner), Proc. 45th IEEE Conference on Decision and Control, San Diego, 2006, 2861-2865.
- 59. A linear control system model for risk reserves (with T. E. Duncan and P. Mandl), Proc. American Control Conference, Seattle, 2008, to appear.
- 60. Linear stochastic equations in a Hilbert space with a fractional Brownian motion (with T.

E. Duncan and B. Maslowski), Control Theory Applications in Financial Engineering and Manufacturing (H. Yan, G. Yin and Q. Zhang, eds.), Springer Science + Business Media, 2006.

- 61. Stochastic integration for fractional Brownian motion in Hilbert spaces (with T. E. Duncan and J. Jakubowski), Stochastics Dynamics, 6, (2006).
- 62. Ergodic and adaptive control of hidden Markov models (with T. E. Duncan and L. Stettner), Math. Met. Oper. Res., 62 (2005).
- 63. Stochastic equations in Hilbert space with a multiplicative fractional Gaussian noise (with T. E. Duncan and B. Maslowski) Stoc. Proc. Appl. 115 (2005), 1357-1383.
- 64. Sampling of parameter estimation for a second order linear system with a fractional Brownian motion (with T. E. Duncan), Proc. Joint 44th IEEE Conference on Decision and Control and European Control Conference, Seville, Spain, 2005, 3135-3139.
- 65. Distributed Parameter Systems with a Multiplicative Fractional Gaussian Noise (with T. E. Duncan), Proc. 16th IFAC World Congress, Prague, July 2005.
- 66. Making Connections with Stochastic Modeling, Proc. of the 10th IEEE International Conference on Methods and Models in Automation and Robotics, Miedzyzdroje, Poland, September 17-23, 2004.
- 67. Random Walk Around the Problems in Identification and Stochastic Adaptive Control with Application to Finance, Proc. of AMS-SIAM of the Workshop on Mathematics in Finance, Utah, Lectures in Applied Mathematics, 2004.
- 68. Editor of the Special Issue on the Stochastic Control Methods in Financial Engineering, IEEE Transactions on Automatic Control, March 2004.
- 69. Random Walk Around the Problems in Identification and Adaptive Control of Stochastic Systems, Proc. of the 9th IEEE International Conference on Methods and Models in Automation and Robotics, Miedzyzdroje, Poland, 17-25, 2003.
- Solutions of stochastic linear distributed parameter equations with multiplicative fractional Gaussian noise (with T. E. Duncan and B. Maslowski), Proc. 11th Mediterranean Conference on Automation and Control, Rhodes, Greece, June 2003.
- EEG Ocular Artifact Removal Through ARMAX Model System Identification Using Extended Least Square, (with S. Haas, M. Frei, and I. Osorio), Communications in Information and Systems 3, No.1 (2003).
- An approach to ergodic and adaptive control of hidden Markov models (with T. E. Duncan and L. Stettner), Proc. 41st Conference on Decision and Control, Las Vegas 2002, 1369-1374.
- 73. Robust maximum principle for minimax linear quadratic problem (with A. Poznyak, T. E. Duncan, and V. Boltyanski), Int. J. Control 75 (2002), 1054-1065.
- 74. Adaptive Control of Continuous Time Stochastic Systems (with T. E. Duncan), J. Adapt. Control Signal Process, 16 (2002), 327-340.
- Fractional Brownian Motion and Identification for Linear Stochastic Systems (with T. E. Duncan), Proc. 10th Mediterranean Conf. Automation and Control, Lisbon, Portugal, July 2002.
- 76. Undergraduates' Partnership with K-12 (with D. Duncan), Proc. Amer. Control Conference, Anchorage, May 2002, 1085-1088.

- 77. KU Stochastic Adaptive Control Undergraduate Success Stories (with T. E. Duncan), Proc. Amer. Control Conference, Anchorage, May 2002, 1082-1085.
- A stochastic calculus for fractional Brownian motion in a Hilbert space (with T. E. Duncan and J. Jakubowski), Proc. Fifteenth International Symposium on Math. Theory Networks & Systems, South Bend, August 2002.
- 79. Parameter identification for some linear systems with fractional Brownian motion (with T. E. Duncan), Proc. 15th Triennial World Congress IFAC 2002, Barcelona, July 2002.
- 80. Editor of the Proceedings of the Workshop on Stochastic Theory and Control, LNCIS Vol. 280, (2002), Springer-Verlag, Berlin, Heidelberg.
- 81. Linear stochastic systems in Hilbert spaces with fractional Brownian motion (with T. E. Duncan and B. Maslowski), Stochastic Dynamics 2 (2002), 225-250.
- 82. Robust Stochastic Maximum Principle for multi-model worst case optimization (with V. G. Boltyansky T. E. Duncan and A. S. Poznyak), Int. J. Control 75 (2002), 1032-1048.
- 83. Robust maximum principle for multi-model for Linear Quadratic Problem (with T. E. Duncan and A. S. Poznyak), Int. J. Control 75 (2002) 1170-1177.
- Some properties of linear distributed parameter systems with fractional Brownian motion (with T. E. Duncan and B. Maslowski), Proc. 40th Conference on Decision and Control, Orlando 2001, 808-812.
- Parameter identification for a scalar linear system with fractional Brownian motion (with T. E. Duncan), Proc. IFAC Workshop on Adaptation and Learning in Control and Signal Processing, Cernobbio-Como (2001), 383-387.
- On Stochastic Adaptive Control, Nonlinear Analysis, Theory Methods Appl., Nonlinear Analysis, 47(2001) 4807-4818.
- 87. Average cost per unit time control of stochastic manufacturing systems (with T. E. Duncan and L. Stettner), Math. Methods Oper. Res. 54 (2001), 245-264.
- Identification for some Linear Systems with Fractional Brownian Motion, in Optimal Control Partial Differential Equations, Editors: J. L. Menaldi, E. Rofman, A. Sulem, 2001, 273-283.
- Identification and Adaptive Control of some Stochastic Distributed Parameter Systems, International Journal on Adaptive Control and Signal Processing, Special Issue, 2001, 15, 565-587.
- 90. Risk sensitive adaptive control of discrete time Markov processes (with T. E. Duncan and L. Stettner), Probability and Mathematical Statistics, 21 (2001), 493-512.
- 91. Stochastic calculus for fractional Brownian motion I Theory (with T. E. Duncan and Y. Hu), Proc. 39th Conference on Decision and Control, Sydney, 2000.
- 92. Some aspects of a robust maximum principle (with A. Poznyak, V. Boltyansky and T. E. Duncan), Proc. Fourteenth International Symposium of Mathematical Theory of Networks and Systems, Perpignan, France, 19-23 June 2000.
- 93. Stochastic calculus for fractional Brownian motion I Theory (with T. E. Duncan and Y. Z. Hu) SIAM J. Control Optim., 38 (2000), 582-612.
- 94. Adaptive control for semilinear stochastic systems (with T. E. Duncan and B. Maslowski),

SIAM J. Control Optim., Vol. 38, No. 6 (2000), 1683-1706.

- On adaptive control of discrete time Markov processes by the method of large deviations (with T. E. Duncan and L. Stettner), Applicationes Mathematicae, 27, 3 (2000) pp. 265-285.
- Identification for Linear Stochastic Distributed Parameter Systems with Boundary/Point Control, Stochastic Analysis, Control, Optimization and Applications (W. McEneaney, G. G. Yin and Q. Zhang, eds.) Birkhauser 1999, 497-505.
- Some methods of stochastic calculus for fractional Brownian motion (with T. E. Duncan and Y. Z. Hu), Proc. 38th Conference on Decision and Control, Phoenix, 1999, 2390-2393.
- 98. Analysis and modeling of ATM traffic data (with Y. Chu, T. E. Duncan, M. Matache and P. Zimmer) Proc. Amer. Control Conf., San Diego, (1999), 4438-4440.
- 99. An approach to risk sensitive adaptive control (with T. E. Duncan and L. Stettner), Proc. 14th IFAC World Congress, Beijing, (1999), Vol. I, 463-467, Pergamon.
- A note on sampling and parameter estimation in higher order linear stochastic systems (T. E. Duncan and P. Mandl), IEEE Trans. Autom. Control 44 (1999), 2120-2125.
- 101. Stochastic Systems, Encyclopedia of Electrical and Electronics Engineering, John Wiley & Sons, v. 20 (ed. J. G. Webster), 543-554, 1999.
- 102. A Kiefer-Wolfowitz algorithm with randomized differences (with H. F. Chen and T. E. Duncan), IEEE Trans. Autom. Control, 44 (1999), 442-454.
- 103. Adaptive continuous time linear quadratic Gaussian control (with T. E. Duncan and L. Guo), IEEE Trans. Autom. Control 44 (1999), 1653-1662.
- Adaptive control of stochastic manufacturing systems with hidden Markovian demands and small noise (with T. E. Duncan and Q. Zhang), IEEE Trans. Autom. Control 44 (1999).
- 105. Stochastic Adaptive Control, Proc. IFAC Workshop, Glasgow, 1998.
- Ergodic boundary/point control of stochastic semilinear systems (with T. E. Duncan and B. Maslowski), Proc. 37th Conference on Decision and Control, Tampa, 1998, 2347-2352.
- Some results on risk sensitive adaptive control of discrete time Markov processes (with T. E. Duncan and L. Stettner), Proc. 37th Conference on Decision and Control, Tampa, 1998, 3462-3466.
- 108. Ergodic boundary/point control of stochastic semilinear systems (with T. E. Duncan and B. Maslowski), SIAM J. Control Optim. 36 (1998) 1020-1047.
- 109. Some results on the adaptive control of stochastic semilinear systems (with T. E. Duncan and B. Maslowski), Proc. 37th Conference on Decision and Control, Tampa, 1998, 4028-4032.
- 110. Discretized maximum likelihood estimates for adaptive control of ergodic Markov models (with T. E. Duncan and L. Stettner), SIAM J. Control Optim. 36 (1998), 422-446.
- 111. Adaptive Control of a Partially Observed Discrete Time Markov Process (with T. E. Duncan and L. Stettner), Appl. Math. Optim. 37 (1998), 269-293.

- 112. Adaptive control of stochastic manufacturing systems with hidden Markov demands and small noise (with T. E. Duncan and Q. Zhang), Proc. 36th Conference on Decision and Control, San Diego, 1997, 4058-4063.
- Weighted Least Squares and Continuous Time Adaptive LQG Control (with T. E. Duncan and L. Guo), Proc. 36th Conference on Decision and Control, San Diego, December 1997.
- 114. Stochastic LQ Adaptive Control for Continuous Time First Order Systems via CWLS (with A. J. Gao), Systems and Control letters, Vol. 31, 149-154, 1997.
- 115. Stochastic Adaptive Control and Manufacturing Systems, Lectures in Applied Mathematics, Vol. 33, 201-217, 1997.
- Limit Theorems of Probability Theory and Optimality in Stochastic Evolution Systems, Journal of Mathematical Systems, Estimation and Control, Vol. 7, No. 4, 1997, 417-437.
- 117. On ergodic control of stochastic evolution equations (with T. E. Duncan and L. Stettner), Stoc. Proc. Appl. 15 (1997), 723-750.
- 118. Ergodic distributed control for parameter dependent stochastic semilinear systems in Hilbert space (with T. E. Duncan and B. Maslowski), Proc. Conf. Stochastic Differential and Differential Equations, BirkhŠuser 1997.
- 119. Adaptive control of Markov processes using large deviations (with T. E. Duncan and L. Stettner), Proc. 35th Conference on Decision and Control, Kobe, 1996, 360-365.
- Computational methods for stochastic partial differential equations (with T. E. Duncan and P. Zimmer), Proc. 35th Conference on Decision and Control, Kobe, 1996, 1765-1766.
- 121. A stochastic approximation algorithm with random differences (with H. F. Chen and T. E. Duncan), Proc. IFAC 1996 World Congress, San Francisco.
- 122. Stochastic Adaptive Control for Continuous Time Linear Systems with Quadratic Cost (with H. F. Chen, T. E. Duncan), J. of Applied Math. and Optimiz., 34 (1996) No 2, 113-138
- 123. Numerical differentiation and parameter estimation in higher order stochastic systems (with T. E. Duncan and P. Mandl), IEEE Transactions on Automatic Control, Vol. 41, No. 4, April 1996, 522-532.
- 124. Numerical differential and parameter estimation in higher order stochastic systems under discrete observation (with T. E. Duncan and P. Mandl), IEEE Transactions on Automatic Control, 44 (1996), 522-532.
- 125. Limit theorems of probability theory in linear controlled evolution systems with quadratic cost (summary), J. Math. Sys. Estim. Control 5 (1995), 99-102.
- 126. Numerical methods for the stochastic adaptive control of some investment and consumption models with transaction costs (with T. E. Duncan and O. Zane), Proceedings of the 34th Conf. on Decision and Control, 1995.
- 127. Discretized maximum likelihood estimates and almost self-optimizing controls for ergodic Markov models (with T. E. Duncan and L. Stettner), Proceedings of the 34th IEEE Conf. on Decision and Control, 1995, 1630-1634.
- 128. Some approaches to adaptive control of stochastic linear distributed parameter

systems (with T. E. Duncan), the Third IEEE Mediterranean Symposium on New Directions in Control and Automation, Limassol, Cyprus, 1995.

- 129. Some computational aspects of stochastic adaptive control (with T. E. Duncan), Proc. Intern. Conf. Control and Information, Hong Kong, June 1995.
- Some results for the identification and adaptive control of stochastic linear and semilinear system (with H. F. Chen and T. E. Duncan), Proc. 1995 Amer. Control Conf., Seattle.
- 131. On stochastic adaptive control of an investment model with transaction fees (with T. E. Duncan, M. Faul and O. Zane), Ulam Quarterly, 1995, 101-109.
- 132. On Ljung's approach to system parameter identification, Proc. 10th IFAC Symposium on Systems Identification (with H. F. Chen and T. E. Duncan), (eds. M. Blanke and T. Sšderstršm), v.2, 1994, 667-671.
- 133. Computation methods for the stochastic adaptive control for an investment model with transaction fees (with T. E. Duncan, M. Faul and O. Zane), Proc. 33rd Conf. on Decision and Control, Orlando, 1994, 2813-2816.
- 134. On Statistical Sampling for System Testing (with T. E. Duncan, P. Mandl), IEEE Transactions on Automatic Control, Vol. 39, No. 1, 1994, 118-122.
- 135. On the ergodic and adaptive control for stochastic differential delay systems (with T. E. Duncan and L. Stettner), J. Optimization Theory Appl. 81, 1994, 509-531.
- 136. Almost self-optimizing strategies for the adaptive control of diffusion processes (with T. E. Duncan and L. Stettner), J. Optimization Theory Appl. 81, 1994, 479-507.
- Adaptive Boundary and Point Control of Linear Stochastic Distributed Parameter Systems (with T. E. Duncan and B. Maslowski), SIAM, J. Control Optim. 32, 1994, 648-672.
- 138. Numerical differentiation and parameter estimation for dth order linear stochastic systems (with T. E. Duncan and P. Mandl), Proc. 33rd Conf. on Decision and Control, Orlando, 1994, 1666-1671.
- Adaptive Boundary Control with Linear Stochastic Distributed Parameter Systems (with T. E. Duncan and B. Maslowksi), Proc. of 32nd Conf. on Decision and Control, San Antonio, 1993, 369-374.
- 140. An approach to adaptive boundary control of linear stochastic distributed parameter systems (with T. E. Duncan), Proc. IFAC 1993 World Congress, Sydney, X 181-194.
- 141. Adaptive Control of Stochastic Semilinear Systems (with T. E. Duncan), Proc. 32nd Conf. on Decision and Control, San Antonio, 1993, 2419-2423.
- 142. Some Aspects of the Adaptive Control of a Partially Observed Discrete Time Markov Processes (with T. E. Duncan and L. Stettner), Proc. 32nd Conf. on Decision and Control, San Antonio, 1993, 3523-3526.
- 143. Some Aspects of the Adaptive Boundary Control of Stochastic Linear Hyperbolic Systems (with T. E. Duncan and J. Lasiecka), Proc. 32nd Conf. on Decision and Control, San Antonio, 1993, 2430-2434.
- Control Theory Methods for Consistency in some Least Squares Identification Problems (with T. E. Duncan, P. Mandl), IEEE Transactions on Automatic Control, Vol. 38, No. 8, 1993, 1289-1292.

- 145. Recent Advances in Stochastic Adaptive Control of Evolution Systems, Ulam Quarterly, 3, 1992.
- 146. Some aspects of the adaptive boundary and point control of linear distributed parameter systems (with T. E. Duncan and B. Maslowski), Proc. of the 31st IEEE Conference on Decision and Control, Tucson, Arizona, December 1992, 1077-1081.
- 147. Adaptive Boundary Control and Uniform Convergence of Riccati Operators Arising in Hyperbolic Systems (with T. E. Duncan and I. Lasiecka), Proc. of the 31st IEEE Conference on Decision and Control, Tucson, Arizona, December, 1992, 1082-1084.
- Continuous Time Adaptive LQG Control (with H. F. Chen, T. E. Duncan) Proc. of 31st IEEE Conference on Decision and Control, Tucson, Arizona, December 1992, 3227-3232.
- 149. On Least Squares Estimation in Continuous Time Linear Stochastic Systems (with T. E. Duncan and P. Mandl), Kybernetika, 28, 1992, 169-180.
- 150. On the Consistency of a Least Squares Identification Procedure in Linear Evolution Systems, Stochastics and Stochastics Reports, 39, 1992, 83-94.
- 151. Asymptotic Distribution of Some Quadratic Functionals of Linear Stochastic Evolution Systems, J. Optimization Theory Appl. 75, No. 2, 1992, 389-400.
- 152. Uniform Operator Continuity of the Stationary Riccati Equation in Hilbert Space (with A. Chojnowska-Michalik and T.E. Duncan), Journal of Applied Math. and Optimiz, 25, 1992, 171-187.
- 153. On stochastic adaptive control, Ulam Quarterly Vol. 1, Number 2, 1992, 19-32.
- On Boundary Control of Unknown Linear Stochastic Distributed Parameter Systems (with T. E. Duncan, B. Maslowski), Lecture Notes on Control and Info Sci, 180, Springer-Verlag, 1991.
- 155. Some methods for the adaptive control of continuous time linear stochastic systems (with T. E. Duncan), Topics in Stochastic Systems: Modelling, Estimation and Adaptive Control, Lecture Notes in Control and Info. Sci., 161 (1991), 242-267, Springer-Verlag.
- Limit Theorems of Probability Theory and Optimality in Stochastic Evolution Systems, Proc. of 16th Symposium on Operations Research, Trier, Germany, 1991, 276-277.
- 157. Some Methods for the adaptive control of continuous time linear stochastic systems (with T.E. Duncan), Lecture Notes on Control and Info. Sci., 161, Springer-Verlag, 1991, 242-268.
- 158. Adaptive control of linear stochastic evolution systems (with T.E. Duncan and B. Goldys), Stochastics and Stochastics Reports, 36, 1991, 71-90.
- 159. Some aspects of the adaptive control of stochastic evolution systems (with T.E. Duncan), Proc. of 28th Conference on Decision and Control, 1989, reprinted in Advances in Adaptive Control, IEEE Press. 1991, 222-226.
- 160. Some aspects of the continuity of the stationary Riccati equation in Hilbert space (with A. Chojnowska-Michalik and T.E. Duncan), Proc. of 29th Conference on Decision and Control, 1990, 2321-2326.
- 161. On exponentially discounted adaptive control (with P. Mandl and T.E. Duncan),

Kybernetika 26, 1990, No. 5, 361-372.

- 162. Prediction of the aggregated autoregressive process, Statistical Review 4, 1990, 281-289.
- 163. Adaptive control of continuous-time linear stochastic systems (with Tyrone Duncan), Mathematics of Control, Signals and Systems, 3, 1990, 45-60.
- 164. Adaptive control of stochastic systems, Lecture Notes on Control and Information Science, Springer-Verlag, 136, 1989, 328-343.
- 165. The rate of convergence and asymptotic normality of the estimator in a controlled investment model with time-varying parameters, Lecture Notes on Control and Information Science, Springer-Verlag, 126, 1989, 266-278.
- 166. Adaptive control of three continuous time portfolio and consumption models (with Tyrone Duncan), Optimization Theory Appl., 61, 1989, 61-71.
- 167. The rate of convergence for an estimator in a portfolio and consumption model (with Tyrone Duncan), J. Optimization Theory Appl., 61, 1989, 53-59.
- 168. Adaptive control of a continuous time portfolio and consumption model (with Tyrone Duncan), J. Optimization Theory Appl., 61, 1989, 47-52.
- 169. Some quadratic functionals and self-tuning control (with Petr Mandl and Tyrone Duncan), Proc. 27th Conference in Decision and Control, 1988, 1219-1222.
- 170. On the consistency of a least squares identification procedure (with Petr Mandl and Tyrone Duncan), Kybernetika, 24, 1988, 340-346.
- 171. Adaptive control of linear delay time systems (with Tyrone Duncan), Stochastics, 24, 1988, 45-74.
- 172. The rate of convergence and asymptotic distributions for some adaptive control problems (with Tyrone Duncan), Proc. 26th Conf. on Decision and Control, Los Angeles, 1987, 1666-1669.
- 173. Adaptive control of some continuous time portfolio and consumption models (with Tyrone Duncan), Proc. 26th Conf. on Decision and Control, Los Angeles, 1987, 1657-1659.
- 174. A parameter estimate associated with the adaptive control of stochastic systems (with Tyrone Duncan), Lecture Notes in Control and Information Sciences, 83, 1986, 508-514.
- 175. On adaptive control, research monograph, Habilitation dissertation, Central School of Planning and Statistics, SGPiS-Publishers, Warsaw, 1986, 184 pages.
- 176. The aggregated autoregressive process, Statistical Review 2 (1980), 345-356.
- 177. On relations between prediction of a multidimensional autoregressive process and the aggregated autoregressive process, Proceedings of Annual Czech-Polish-Russian Meeting of Econometricians, Poland, 1978, 5-20.

# B. Books

1. Stochastic adaptive control (with T. E. Duncan), chapter in Encyclopedia of Systems and Control, Springer, 2014, 1-6.

- 2. Stochastic adaptive control (with T. E. Duncan), chapter in The Control Handbook 2<sup>nd</sup> Edition (W. Levine ed.), Taylor and Francis, CRC, December 2010.
- 3. Education and Qualification for Control and Automation, Book Chapter 44a, Nof, Springer Handbook of Automation (78830-0) 2009 (with Matthew Alan Verleger).
- Innovative Strategies for Retention of Women in Engineering, (with F. Chowdhury and K. Hoo), Book Chapter, in Gender and Engineering: Strategies and Possibilities, I. Welpe, B. Reschka, J. Larkin (eds), Gender Research Applied, International Verlag der Wissenschaften, Vol. 3, 2007.
- 5. Stochastic Theory and Control, LNCIS Vol. 280, (2002), Springer-Verlag Berlin Heidelberg.
- 6. Stochastic adaptive control (with T. E. Duncan), chapter in The Control Handbook, W. S. Levine, ed. CRC Press, 1995.
- Stochastic Adaptive Control, chapter in Adaptive Control, Filtering, and Signal Processing, IMA Volumes in Mathematics and its Applications, Springer-Verlag, 74 (1995), 299-325
- 8. On adaptive control, SGPiS-Publishers, Warsaw, 1986.
- 9. Elementary probability theory (textbook), SGPiS-Publishers, Warsaw, (1976-first ed.), (1979- second ed.), (1983-third ed.), 92 pages.
- 10. (With W. Dubnicki), Lectures on calculus (textbook), SGPiS-Publishers Warsaw, (1976first ed.), (1979-second ed.), (1981-third ed.), (1984-fourth ed.), 131 pages.

# C. Other Publications - Journals and Proceedings

- 1. Co-Editor of the Special Volume " Control Theory and Nonlinear Filtering" of 4 Issues in the Communications in Information and Systems, 6.3, 6.4, 2006 and 7.1 and 7.2, 2007
- 2. Several articles on Control Education in the Control Systems Magazine.
- 3. "Mathematics Education of Tomorrow," Newsletter of AWM, October 2004.
- 4. 1999-present, Contributor to monthly Women in Control newsletter.
- 5. 1998-1999 Editor of the column "Membership Activities," the IEEE Control Systems Magazine.
- 6. 1996-1999 Editor of the column "Women in Control," the IEEE Control Systems Magazine.
- 7. Co-Editor of the Proceedings of the First Kansas Workshop on Stochastic Theory-Adaptive Control, Lecture Notes on Control and Info. Science, 184, Springer-Verlag, 1992, 500 pages.
- 8. Editor of the Proceedings of the National Conference on Education of Mathematics at Economic Universities, Studies of the Methodological Center, 42 (1980), 125-225.
- 9. The role of mathematics in economics, Studies of the Methodological Center, WSEP, 42 (1980), 125-129.
- 10. The role of labs and seminars on mathematics for educating economists, Studies of the Methodological Center, WSEP, 30 (1977), 25-32.
- 11. On mathematics and how to teach mathematics to the students of economics, Studies of

the Methodological Center, WSEP, 26 (1976), 84-91.

- 12. Editor of the collected papers of the Central School of Planning and Statistics Branch of the Polish Mathematical Society, Monograph, Central School of Planning and Statistics (1975), 117 pages.
- 13. Teaching mathematics, Studies of the Methodological Center, the Warsaw School of Economist Publishers (WSEP), 24 (1975), 90-100.

## D. Research Reports of the Institute of Cybernetics - the Warsaw School of Economics

- 1. Prediction of multidimensional autoregressive process, 1979, 65-90.
- 2. Aggregation of multidimensional autoregressive processes, 1978, 40-65.
- 3. Linear prediction and filtering of stochastic processes, 1977, 20-55.
- 4. Prediction of economic time series, v. 2, 1976, 75-105.
- 5. The analysis of multidimensional economic time series, v. 1, 1976, 125-155.
- 6. The game on the Markov chain with rewards, 1973, 1-20.

## **RESEARCH INTERESTS**

Currently my research interests are stochastic processes, stochastic adaptive control, stochastic theory, mathematical statistics, the relation between statistics and control theory, mathematics of finance, manufacturing systems, control in telecommunication, epilepsy, as well as biomedicine, biostatistics, biophysics, bioinformatics and mathematics education at all levels, in particular integrating research, teaching and learning and promoting importance of good communication and good writing in math.

# COURSE DEVELOPMENT

**AE 713,** Identification, Filtering, Estimation and Adaptive Control for aerospace engineering graduate students

**Math 750** Stochastic Adaptive Control for math, science, engineering, economics and business school students.

## DESCRIPTION OF THE COURSE:

Stochastic adaptive control theory is concerned with recursive estimation of unknown parameters and control for systems with uncertainties modeled as random variables or random processes. The theory is motivated by applications in such diverse areas as aerospace guidance and control, signal processing and communications, manufacturing processes, and financial economics. Mathematical theory of stochastic adaptive control for models based on stochastic difference equations such as autoregressive processes and stochastic differential equations as Markov diffusion processes have been developed and will be presented.

### THE MAIN COURSE TOPICS:

- · Conditional Expectation and Martingales.
- Estimation Methods: Least Squares and Maximum Likelihood Method.
- Limit Theorems of Probability.
- Introduction to Stochastic Processes. Basic Examples: Markov Chains and Brownian Motion.

- Introduction to the Optimal Control Theory. Feedback Control.
- Linear Controlled Stochastic Systems and their properties.
- · Linear Filtering Theory, Kalman Filter
- Controlled Markov Chains.
- Introduction to System Identification. Identification of Markov Chains, Identification of Linear Systems.
- Adaptive Control of Markov Chains. Adaptive Control of Linear Stochastic Systems.
- Application of Stochastic Adaptive Control.

# COURSES TAUGHT

# KU

- Probability and Statistics: Math 365, Math 526, Math 627, Math 727, Math 728
- Calculus: Math 115, Math 116, Math 121, Math 122, Honors Calculus, Math 141, Math 142, Math 143
- Stochastic Processes: Math 865
- Differential Equations: Math 320, Math 321
- Stochastic Adaptive Control: Math 750 and AE713
- Statistics of Stochastic Processes, Continuous Time Adaptive Control, Optimization Theory,
- Operations Research, Dynamical Systems: Math 796, Math 993
- Stochastic Adaptive Control Seminar (weekly): Math 990
- Coordinator of Calculus courses: Math 115, Math 121, Math 122
- Math 115 (large class)
- Statistics of Random Processes: Math 796

# Warsaw School of Economics

- Stochastic Processes
- Stochastic Modeling
- Operation Research
- Mathematical Statistics
- Real Analysis
- Time Series Analysis
- Forecasting Theory
- Linear and Dynamic Programming
- Optimization Theory
- Game Theory

# Lawrence Sunset Hill Elementary School (volunteer work)

• Probability and Algebra, course developed based on American, French and Polish Textbooks for 4th through 6th grade.

# Lawrence West Junior High School and Lawrence Free State High School (volunteer work)

Probability, Statistics and Calc

# RECENT TEACHING AT KU

- Spring 2016
  - Sabbatical
  - Math 899 One master's student
  - Math 896 Two-master's students
  - Math 699 One undergraduate student who conducts research

• Fall 2015

- MATH 526 Applied Mathematical Statistics (Lecture) with 85 students enrolled
- Math 627 Probability (Lecture) with 49 students enrolled
- Math 750 Stochastic Adaptive Control with 14 students enrolled (Per Request)
- Math 899 Masters Research Component with 1 student enrolled

## CHAIRPERSON ON EXAMINATIONS

2014- 2015 - present: External Member on the Ph.D. Committees for

- a. Music Department (10)
- b. Economics (8)
- c. Engineering (2)
- d. Physics (1)

## Mathematics M.A.

Current Students: Nicholas Oderio, Subhankar Halder. Fatimah Ali Ghafii

- 2016: Peixin Wang
- 2015 B. Harris, D. A. Eifler
- 2014 T. Lindsey, K. Alanazi
- 2013 C. Clifton, N. Welch
- **2012** R. Zima
- 2010 C. White, V. Kalyankar, J. Shea, G. Achoki
- 2009 L. Zhao, M. Jia
- 2008 S. Legresley, X. Yao, X. Yang, L. Zhao
- **2007** G. Tao, T.T. Wang, B. Pera
- 2006 J. Kensler, M. Huey
- 2005 N. Smith Kadavi
- 2004 M. O'Byrne, K. Hughes, A. Funderburk
- 2003 B. Pierson, A. Davies, J. Mazzapica
- 2002 D. Brannen
- 2001 M. Wojnowski
- 2000 L. Burke, R. Brown
- 1999 S. Haas
- **1997** A. Yuen
- **1995** J. Murakami
- 1994 Y. Zachariou
- 1993 T. Atteberry
- **1991** Z. Yang, J. Guo, B. Lee

### Mathematics Ph.D.

Current Students: Nicholas Oderio, Subhankar Halder

- 2015 C. Clifton
- 2011 Y. Zachariou
- 2000 D. Matache
- **1996** A. Gao
- **1995** O. Zane, Z. Chen

# UNDERGRADUATE HONORS THESIS

S. Haas (Goldwater Scholar and NSF Graduate Fellowship, graduated with 4 degrees with honors from KU in math and engineering, Ph.D. in engineering from MIT, 2002)

M. Haug (graduated in math and philosophy from KU, 4 Graduate Fellowships including NSF, Ph.D. from Cornell University, philosophy of science)

N. Welch (NSF Graduate Fellowship, graduated in math and philosophy from KU, in Ph.D. program in mathematics, Currant Institute NY)

S. Corder (Goldwater Scholar, NSF Graduate Fellowship, graduated from KU in math, physics and astronomy, Ph.D. in physics from CALTECH)

S. Clark (graduated from KU in math, physics and astronomy, Ph.D. in physics from Boston University)

S. Feldt (graduated from KU in math and physics Goldwater Scholar, Ph.D. in Biophysics from University of Michigan)

J. Meyers (graduated from KU in math, physics and astronomy, Goldwater Scholar, majoring in math, physics and astronomy, Ph.D.in physics from the University of California, Berkeley)

I. Lewis (major in math and physics, Ph.D. in physics from the University of Wisconsin, Madison)

## **RESEARCH UNDERGRADUATE EXPERIENCE**

2014 & 2015: Summer Undergraduate Research Experience under NSF Grant for the two Honors Program Students and two of the three Honors Students who were recognized with one of the highest Honors Scholarship from the Mathematics Department: Jonathan Bush and Alec Knutsen J. Hooper Ims (2012 Goldwater Scholar), John Davis, Zachary Sites, Subhankar Halder,

### **CURRENT UNDERGRADUATE HONORS PROGRAM STUDENTS**

Alec Knutsen, Math & CS

Jonathan Bush, Math & Physics

### HIGH SCHOOL STUDENTS – SUMMER RESEARCH EXPERIENCE

Summer 2006: Kyle Chauvin and Baoqing Zhou

### OTHER MENTORSHIP

Mentor and Advisor to the IEEE CSS Women in Control and 600 Affinity Groups around the world of the IEEE Women in Engineering, High School Teachers and Students, past participants of the IEEE CSS, AACC, and IFAC Workshops for High School Teachers and Students

### **RECENT VISITORS**

- B. Maslowski, May 2013 two weeks, Sep.-Oct. 2015 two weeks.
- Q. Zhang, April 2015.
- I. Lasiecka, Univ. Memphis, Jan. 2014. (Bold Aspirations Visitor and Lecture Series).
- S. Mitter, MIT, April 2014. (Bold Aspirations Visitor and Lecture Series).
- R. DeVeaux, Williams College, Nov. 2014.
- M. Boudreau, Actuarial Resources Co., Mar. 2014, Feb. 2015.
- G. Yin, Wayne State Univ., Mar. 2014.
- S. Haas, KU Graduate, November 2015
- B. McClendon, Google, April and October, 2015
- S. Muldoon, University at Buffalo, SUNY, October, 2015
- U. Ledzewicz, Southern Illinois University, October 2014
- A. Friedman, Ohio State University, October 2014
- M. Lewicka, University of Pitsburgh, January 2017

Updated: February 17, 2017