

## 2002 Control Awareness Days

Students + Workshops = Success + Fun

**December 11, 2002**  
**The Venetian Hotel, Room 605-606**  
**Las Vegas, Nevada**

### Program

- 8:00 Arrival of students and teachers at the Venetian Hotel
- 8:10 Welcome, Bozenna Pasik-Duncan, chair of the TC on Control Education  
Leonard Shaw, President of CSS  
Cheryl Schrader, President-Elect  
John Baillieul, Vice President for Technical Activities  
Umit Ozguner and Kenneth A. Loparo, Co-chairs, 2002 Conference on Decision and Control  
Kishan Baheti, National Science Foundation
- 8:30 – 9:30 CDC Plenary Talk, **Stephen P. Boyd**, Stanford University  
“Advances in Convex Optimization: Interior-Point Methods, Cone Programming, and Applications”
- 9:30 – 10:00 Visit conference exhibits
- 10:00 – 12:00 **Session I - Chair: Molly Shor, Oregon State University**
- 10:00 – 10:20 **Christos G. Cassandras**, Professor, Department of Manufacturing Engineering and Center for Information and Systems Engineering (CISE), Boston University  
“Joys and Perils of Automation”
- 10:20 – 10:40 **Raffaello D’Andrea**, Associate Professor, Department of Mechanical and Aerospace Engineering, Cornell University  
“Control of Autonomous Vehicles”
- 10:40 – 11:00 **Theodore E. Djaferis**, Professor, University of Massachusetts  
“The Power of Feedback”
- 11:00 – 11:20 **T. E. Duncan**, Professor, Department of Mathematics, University of Kansas  
“Brownian Motion: Past and Present”

- 11:20 – 11:40      **Katsuhisa Furuta**, Professor, Department of Computers and Systems Engineering, Tokyo Denki University  
“Understanding Phenomena through Real Physical Objects – Understanding Controlling Pendulum”
- 11:40 – 12:00      **P. R. Kumar**, Franklin W. Woeltge Professor, Department of Electrical and Computer Engineering, University of Illinois  
“How the Internet and Wireless Networks are Controlled: What’s Happening behind the Screen”
- 12:00 – 12:40      **Lunch Break** (provided by Control Systems Society)
- 12:40 – 1:30      **Session II – Chair: Pedro Albertos, Professor, Technical University of Valencia**
- 12:40 - 1:00      **Richard M. Murray**, Professor, Department of Mechanical Engineering and the Chair of the Division of Engineering and Applied Science at the California Institute of Technology  
“Control of Jet Engines”
- 1:00 – 1:20      **Mark W. Spong**, Professor, Department of General Engineering and The Coordinated Science Laboratory, University of Illinois  
“Future Careers in Embedded Systems, Mechatronics and Control”
- 1:20 – 1:30      Summary of the Sessions
- 1:30 – 2:30      Meet Members of the Technical Committee on Control Education, former Control Research Experience Undergraduate Program students and Control Graduate students

**Presentations by Panelists:**

Pedro Albertos, Professor, Technical University of Valencia  
“Automatic Control as an Interdisciplinary Matter in  
Engineering Curricula”

Deana Delp, Arizona State University  
“Semiconductor Manufacturing Capacity Analysis and  
Improvement”

Dominique Duncan, Lawrence Free State High School and  
University of Kansas  
“Undergraduate’s Partnership with K-12”

Shane Haas, Massachusetts Institute of Technology  
“How Mathematics can turn a Single Dollar into Millions, and  
can Hurl bits of Information around the Globe at the Speed  
of Light”

Jing Sung, Powertrain Control Research and Development  
Ford Research Lab  
“Control and Mobility”

John Westman, Assistant Professor, Miami University , Ohio  
“Control, Mathematics, Computers and Cancer: An  
Integrated Approach to Cancer Treatment”

Yiannis Zachariou, University of Kansas  
"Stochastic Analysis and Control in finance,  
telecommunications  
and medicine"

2:30 Departure of Clark High School students

2:30 – 3:00 Final Discussion  
Moderator: John Baillieul, Boston University