

Plain Talk on Control for a Wide Range of the Public

Grand Ballroom A

Wednesday, December 12, 2007

6:15-8:00 pm

Organizer: Bozenna Pasik-Duncan, University of Kansas
Chair: Bozenna Pasik-Duncan (University of Kansas)
Co-Chair: Fahmida N. Chowdhury (University of Louisiana at Lafayette)
Sponsored by: CSS and AACC Technical Committees on Control Education

One of the major challenges for the controls community is to enhance its own public image and convey the essence and contribution of the field to outsiders; for this, a coordinated effort has to take place. This Special Session has as its purpose to prepare “Plain Talk about the Power, Beauty and Excitement of Control for the Non-Control Engineering Audience.” This series of talks will include a brief history of feedback control and provide a sample of short talks for a target audience of non-control engineering professionals and general public.

Presentations:

- *Introduction and Purpose of the Session*, Bozenna Pasik-Duncan, University of Kansas.
- *The Power of Feedback*, Theodore Djaferis, University of Massachusetts Amherst.
- *Joys and Perils of Automation*, Christos G. Cassandras, Dept. of Manufacturing Engineering and Center for Information and Systems Engineering Boston University.
- *Control Education and the DARPA Grand Challenge*, Richard M. Murray, Control and Dynamical Systems, California Institute of Technology.
- *The Next Phase of the Information Technology Revolution*, P.R. Kumar, University of Illinois, Urbana-Champaign.
- *Controlling Air Traffic*, Claire Tomlin, University of California, Berkeley.
- *Control in Mechatronics and Robotics*, Mark Spong, University of Illinois, Urbana-Champaign.
- *Some uses for Computer-Aided Control System Design Software in Control Education*, William S. Levine and Dimitrios Hristu-Varsakelis, University of Maryland.
- *Application of Control Theory to the Problem of Epilepsy*, Ivan Osorio, University of Kansas Medical Center and Mark Frei, Flint Hills Scientific, L.L.C.
- *Random walk around some problems in stochastic systems and control*, Dominique Duncan, Yale University, Tyrone Duncan and Bozenna Pasik-Duncan, University of Kansas.
- *Understanding Phenomena through Real Physical Objects—Controlling Pendulum*, Katsuhisa Furuta, Tokyo Denki University, Japan.
- *Risk Engineering – Past Successes and Future Challenges*, John Baillieul, Intelligent Mechatronics Laboratory.
- *Control of Unstable Flow Characteristics*, Anuradha Annaswamy, Massachusetts Institute of Technology