

Editorial: Nonlinear Dynamical Systems

IN conjunction with the 1997 AIAA Aerospace Sciences Meeting in Reno, Nevada, Jan. 6–9, the U.S. Air Force Office of Scientific Research (AFOSR) and Sandia National Laboratories sponsored the Nonlinear Dynamical Systems Symposium. The symposium consisted of 52 papers on nonlinear dynamics, aeroelasticity, robotics, estimation, and control in seven sessions over three and a half days. The symposium culminated Wednesday evening with the von Kármán Lecture entitled “Adventures on the Interface of Dynamics and Control” by Professor John Junkins of Texas A&M University. The program committee consisted of

Dr. Kyle T. Alfriend, Texas A&M University, General Chair
Dr. John L. Junkins, Texas A&M University, Co-Chair, Session Chair

Dr. Brian Sanders, AFOSR, Co-Chair

Dr. Rush Robinette, Sandia National Laboratories, Co-Chair

Dr. Earl H. Dowell, Duke University, Session Chair

Dr. John E. Cochran, Auburn University, Session Chair

Dr. David K. Schmidt, University of Maryland, Session Chair

Dr. Jer-Nan Juang, NASA Langley Research Center, Session Chair

Dr. Andrew J. Kurdila, University of Florida, Session Chair

Dr. Gordon G. Parker, Michigan Technological University, Session Chair

This special issue has 23 of the papers that were presented at this symposium. Some of the papers are still in the review cycle and will be published later. Others were not submitted for journal publication. The first paper is the excellent von Kármán Lecture

given by Dr. John Junkins. The papers are in the order given at the symposium. The next six papers and the first Note are from the *Spacecraft Attitude Estimation and Control* session chaired by Dr. John Cochran of Auburn University. The next two papers were presented in the *Stability and Control of Nonlinear Systems* session chaired by Dr. Junkins. These are followed by two papers from the *Smart Materials* session chaired by Dr. Andy Kurdila of the University of Florida, three papers from the *Atmospheric Flight Control* session chaired by Dr. David Schmidt of the University of Maryland, four papers from the *Aeroelasticity* session chaired by Dr. Earl Dowell of Duke University, three papers from the *System Identification and Vibration* session chaired by Dr. Jer-Nan Juang of NASA Langley Research Center, and one paper from the last session, *Modeling and Control of Multi-Body Dynamical Systems*, chaired by Dr. Gordon Parker of Michigan Technological University.

In summary, this experiment of having a special topic symposium in conjunction with the Aerospace Sciences Meeting was a success. The papers were of high quality, and attendance at the sessions was very good. The symposium helped to broaden the scope of the Aerospace Sciences Meeting. Attendance at the 1997 Aerospace Sciences Meeting was a record, due partly to the broadened scope of this symposium. I would like to thank all of the people who helped to make this symposium a success: the organizers of the symposium, the authors, the attendees, the AIAA Meeting organizers, and the AIAA Editorial Staff.

Kyle T. Alfriend
General Chair