

University of Texas' Mark W. Spong joins IRIM as second Visiting Faculty Fellow



Mark W. Spong received the Doctor of Science degree in systems science and mathematics in 1981 from Washington University in St. Louis. He has held faculty positions at Lehigh University, Cornell University, and at the University of Illinois at Urbana-Champaign. Currently, he is a professor of Systems Engineering, professor of Electrical and Computer Engineering and holder of the Excellence in Education Chair in the Erik Jonsson School of Engineering and Computer Science at the University of Texas at Dallas. He was Dean of the Jonsson School at UT Dallas from 2008-2017. During his tenure as dean he added four departments of engineering, nine new degree programs, and more than doubled the number of students and faculty.

Spong is past president of the IEEE Control Systems Society, and a fellow of both the IEEE and the IFAC. His main research interests are in robotics, mechatronics, and nonlinear control theory. He has authored or coauthored more than 300 technical articles, five books, and holds one patent.

His notable awards include the 2018 Bode Lecture Prize from the IEEE Control Systems Society, the 2016 Nyquist Lecture Prize from the ASME, the 2011 Pioneer in Robotics Award from the IEEE Robotics and Automation Society, the first IROS Fumio Harashima Award for Innovative Technologies in 2007, the Senior Scientist Research Award from the Alexander von Humboldt Foundation, the Distinguished Member Award from the IEEE Control Systems Society, the John R. Ragazzini and O. Hugo Schuck Awards from the American Automatic Control Council, and the IEEE Third Millennium Medal.

Mini Course: Nonlinear Control for Robotics

Week 1 (March 26–28)

1:30–3:00 p.m.

Lecture 1 (3/26): Review Dynamics of Robot, Feedback Linearization, I/O Linearization and Zero Dynamics

~TSRB, Auditorium

Lecture 2 (3/27): Control of Underactuated Robots I

~TSRB, Auditorium

Lecture 3 (3/28): Control of Underactuated Robots II

~Whitaker Bldg., Room 1103

Week 2 (April 2–4)

1:30–3:00 p.m.

Lecture 4 (4/2): Control of Underactuated Robots III, Control of Nonholonomic Systems I

~TSRB, Auditorium

Lecture 5 (4/3): Control of Nonholonomic Systems II

~TSRB, Room 132

Lecture 6 (4/4): Control of Nonholonomic Systems III

~Pettit, Rooms 102 A&B