

学术报告会

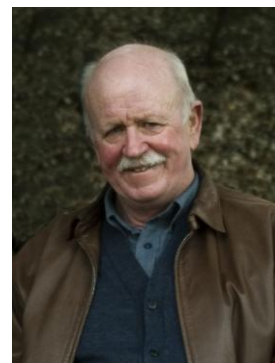
时间: 2013年10月14日(周一)14:00

地点: 电院群楼2-410会议室

Model Predictive Regulation

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Abstract:

Model Predictive Regulation (MPR) is a way to regulate a nonlinear plant in the presence of external commands or disturbances. It is extension of Model Predictive Control (MPC). MPR does not require solving the Francis-Byrnes-Isidori equations and the Bellman Dynamic Programming equations. This is joint work with Cesar O. Aguilar.

Biography:

Arthur J. Krener received the PhD in Mathematics from the University of California, Berkeley in 1971. From 1971 to 2006 he was at the University of California, Davis. He retired in 2006 as a Distinguished Professor of Mathematics. Currently he is a Distinguished Visiting Professor in the Department of Applied Mathematics at the Naval Postgraduate School. His research interests are in developing methods for the control and estimation of nonlinear dynamical systems and stochastic processes. Professor Krener is a Life Fellow of the IEEE, a Fellow of IFAC and of SIAM. His 1981 IEEE Transactions on Automatic Control paper with Isidori, Gori-Giorgi and Monaco won a Best Paper Award. The IEEE Control Systems Society chose his 1977 IEEE Transactions on Automatic Control paper with Hermann as one of 25 Seminal Papers in Control in the last century. He was a Fellow of the John Simon Guggenheim Foundation for 2001-2. In 2004 he received the W. T. and Idalia Reid Prize from SIAM for his contributions to control and systems theory. He was the Bode Prize Lecturer at 2006 IEEE CDC and in 2010 he received a Certificate of Excellent Achievements from IFAC. The American Automatic Control Council awarded him the Richard E. Bellman Control Heritage Prize at 2012 ACC. His research has been continuously funded since 1975 by NSF, NASA, AFOSR and ONR.