

平成 24 年 10 月 13 日

関係各位

システム制御研究会

主査 吉澤 誠

下記のとおり、**第 95 回システム制御研究会**を開催しますので多数ご来聴くださいますよう、ご案内申し上げます。

記

- 日時：平成 24 年 11 月 12 日（月） 15：00～16：30
- 会場：東北大学サイバーサイエンスセンター 3 階中会議室
仙台市青葉区荒巻字青葉 6-3
<http://www.isc.tohoku.ac.jp/map.html>
- 講演者： Prof. Madan M. Gupta (University of Saskatchewan, Canada)
- 演題：Extended-Routh's Stability Approach for the Design of Neuro-Controllers for a Class of Nonlinear Dynamic Systems
- 講演要旨：

With the evolution of our complex technological society and the introduction of new notions and innovative theoretical tools in the field of intelligent systems, the field of neuro-controller is undergoing an enormous evolution. The well-known Routh's stability method for a class of linear time-invariant systems was published in 1905. In this talk we present an extended-Routh's stability approach for the evaluation of stability of nonlinear and timevarying systems. This extended Routh's stability approach, unlike Lyapunov second method of stability, yields very precise boundaries for the stability on the system parameters, and on the amplitude and frequency of input signals. Then we present this novel stability approach, the extended Routh's stability approach, for the design of robust neuro-controllers for nonlinear and timevarying systems. In this lecture we will provide the basic concepts and then going through some advanced theory with applications in the field of neuro-controllers. Examples will be taken from, control systems and robotics fields.

- 共催：計測自動制御学会東北支部
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以上