International Journal of Modern Nonlinear Theory and Application, 2014, 3, I-III
Published Online June 2014 in SciRes. http://www.scirp.org/journal/ijmnta

BOOK ANNOUNCEMENT OF

L. Celentano, Robust Tracking Controllers Design with Generic References for Continuous and Discrete Uncertain Linear SISO Systems, LAP LAMBERT Academic Publishing, 2012

Abstract:

In this book new results on controller design techniques for the tracking of generic reference inputs are presented. They allow the design of a controller for an uncertain process, either continuous or discrete-time, without zeros, and with measurable state. The controller guarantees that the control system is Type 1 and has the desired constant gain and poles or that the control system tracks, with a specified maximum error and with a specified maximum time constant, a generic reference with bounded derivative (variation in the discrete-time case), also in the presence of a generic disturbance with bounded derivative (variation). In addition, it is considered the case in which the reference is known a priori.

The utility and the efficiency of the proposed methods are illustrated with attractive and significant examples of motion control and temperature control.

This book is useful for the design of control systems, especially for manufacturing systems, that are versatile, fast, precise and robust.

Keyword:

Robust Tracking Controllers Design, Continuous and Discrete Uncertain Linear SISO Systems, Generic References

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CURRICULUM VITAE ET STUDIORUM

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How to cite this paper: Celentano, L. (2014) L. Celentano, Robust Tracking Controllers Design with Generic References for Continuous and Discrete Uncertain Linear SISO Systems, LAP LAMBERT Academic Publishing, 2012. Book Announcement. *International Journal of Modern Nonlinear Theory and Application*, **3**, I-III.

gineering from the Università degli Studi di Napoli Federico II, Naples, Italy, in 2006.

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She is an author/reviewer for IEEE, ASME, ELSEVIER and AIP journals and conferences.

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Her personal contributions, very autonomous, to these subjects have a theoretical and/or didactic and/or applicative and/or project-based nature, with high attention to their possible utility for the Scientific, Didactic, Engineering Communities and to use measured economic resources.

The above mentioned book has received scientific recognitions, some of these from

- Professor Jakob Stoustrup

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"Thanks for keeping me posted on your great contributions to our area!
So far, I have looked through your interesting e-book. I liked very much the nice exhibition with advanced theory combined with extremely practical examples."

and from

- Professor Peng Shi

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"I consider your work is in high quality, very useful references to people working in the fields, not only important in theory development, but also with great potentials in real world applications. Well done!"