

A NEW SIMPLE AUTO-TUNING METHOD FOR PID CONTROLLERS

Damir Vrančić, Youbin Peng^{*}, and Janko Petrovčič

*J. Stefan Institute
Jamova 39, SI-1000 Ljubljana, Slovenia
e-mail: damir.vrancic@ijs.si
home page: <http://www-e2.ijs.si/Damir.Vrancic>*

^{}Free University of Brussels
F. D. Roosevelt 50, CP. 165, B-1050 Brussels, Belgium
e-mail: peng@labauto.ulb.ac.be*

Abstract: A simple procedure of tuning the PID controllers, based on the so-called magnitude optimum technique, is given. The tuning procedure requires only the process open-loop step response in order to calculate the PID controller parameters.

Keywords: PID controllers, amplitude optimum, moment method, step response, self-tuning regulators