

# Model-based and Model-free Fuzzy Control of Servo Systems

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## KEYNOTE SPEECH

**Abstract**—This keynote talk covers the following topics: an overview of the Process Control Group at the Politehnica University of Timisoara, Romania; model-based control versus model-free fuzzy control; our contributions to the field; the structure and tuning of two-degree-of-freedom (2-DOF) fuzzy controllers; servo system control applications; indirect Iterative Feedback Tuning (IFT) of anti-windup Proportional-Integral (PI) fuzzy controllers; direct IFT of anti-windup PI fuzzy controllers; and evolving fuzzy systems in relation to control. The talk includes transportation applications in the context of an ERA-NET Cofund Urban Accessibility and Connectivity (ENUAC) JPI Urban Europe project.

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