

# Multi-objective PID Controller Tuning for Multi-model Control of Nonlinear Systems

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## Abstract

Multi-model approaches for non-linear control usually consist in partitioning the operating space of a given non-linear process, in such a way, it is possible to approximate a local linear model for each partition. That allows using standard control and tuning techniques for each local linear model. After that, a global controller merging the set of local controllers is defined to control the original non-linear process. This global controller merges the local