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# LPVOID- A LPV IDENTIFICATION TOOLBOX FOR MATLAB: RECENT AND NOVEL TECHNIQUES

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## Abstract:

In this paper a system identification toolbox for MATLAB is introduced, including a user friendly graphical user interface. The toolbox is appropriate for the identification of systems in discrete-time linear parameter varying (LPV) form. Using LPVOID1 it is possible to identify input-output models in open-loop and closed-loop settings based on experimental data. It comprises several recent LPV identification techniques. Furthermore, a novel method for identifying unstable plants in closed-loop is proposed. The toolbox is equipped with several tools for model validation. Examples for illustration are included.

## Keywords:

Linear parameter varying systems, system identification, non-linear modelling.

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