

FRACTIONAL-ORDER MODELING AND CONTROL: A SET OF TOOLBOXES FOR MATLAB

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Fractional-order calculus, that is the theory of differentiation and integration of arbitrary real (integer and non-integer) order, is one of the rapidly developing areas on natural science and engineering. The proposed talk will be devoted to the presentation of 16 (sixteen) toolboxes for Matlab [10] created and maintained by the authors. The basic theory of the fractional-order modeling and control is available in the books [1] and [2]. The toolboxes are based mostly on the results published in the books [3,4] and in the papers [5–9]. All presented toolboxes along with the related documentation are currently available at the Matlab Central File Exchange (FEX). Instead of the list of the toolboxes, we provide a hyperlink [10] for searching in the FEX.

References

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- [10] Our toolboxes for MATLAB at Matlab Central File Exchange:
<http://www.mathworks.com/matlabcentral/fileexchange/index?utf8=%E2%9C%93&term=author:Podlubny+OR+author:Petras+OR+author:Terpak+OR+author:Skovranek+OR+author:Zecova>