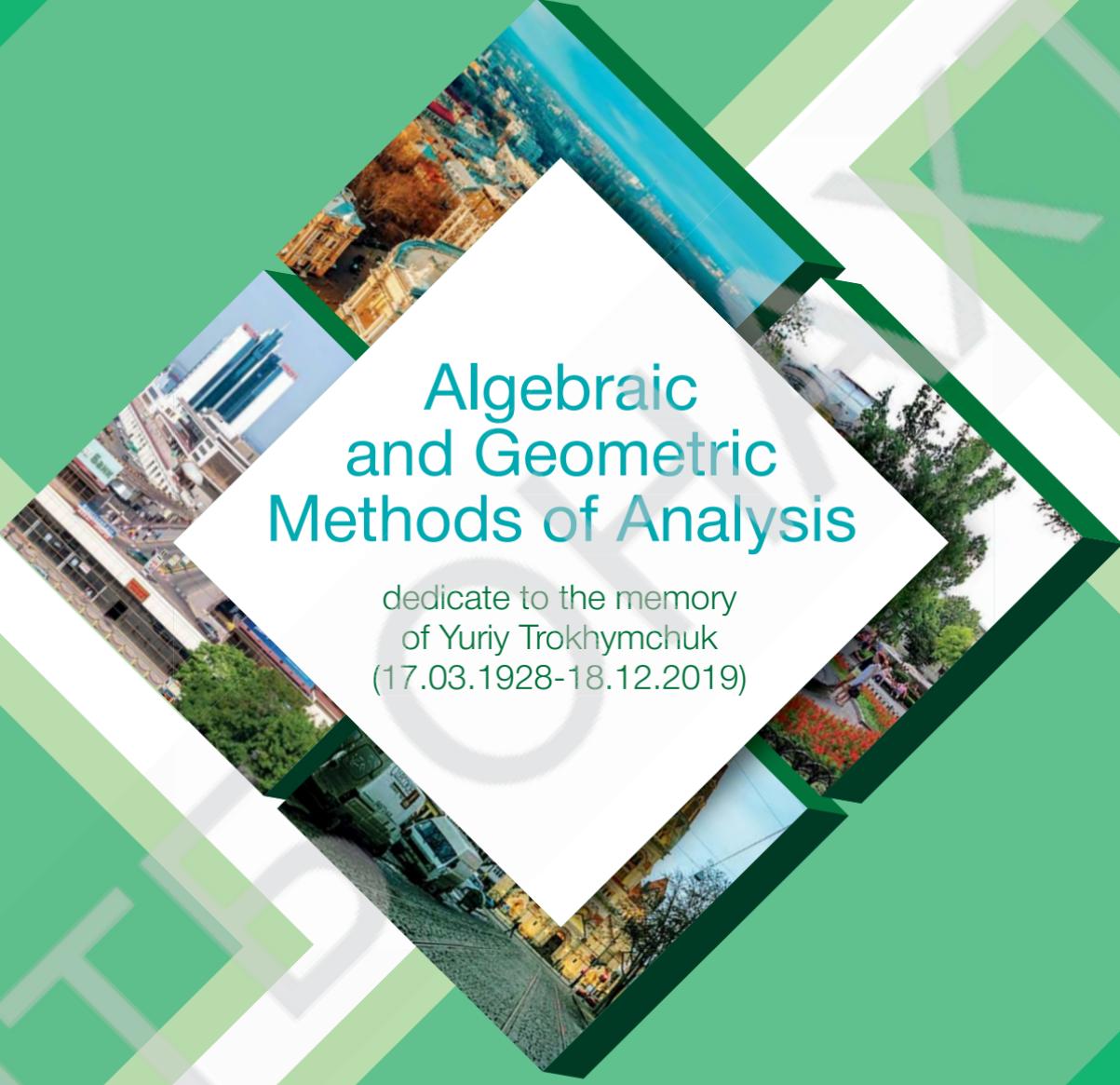


International  
Online Conference



Algebraic  
and Geometric  
Methods of Analysis

dedicate to the memory  
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May 25-28, 2021  
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# On dynamical systems with a prescribed globally bp-attracting set

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Given an arbitrary fixed nonempty closed subset  $\mathcal{C} \subset \mathbb{R}^n$ , we propose an explicit method to construct a dynamical system which admits the regular part of  $\mathcal{C}$  as globally bp-attracting set, i.e. a closed and invariant set which attracts every bounded positive orbit of the dynamical system. We apply this result in order to provide an explicit method of leafwise asymptotic bp-stabilization of the regular part of an a-priori given invariant set of a conservative system. The theoretical results are illustrated for the completely integrable case of the Rössler dynamical system.

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