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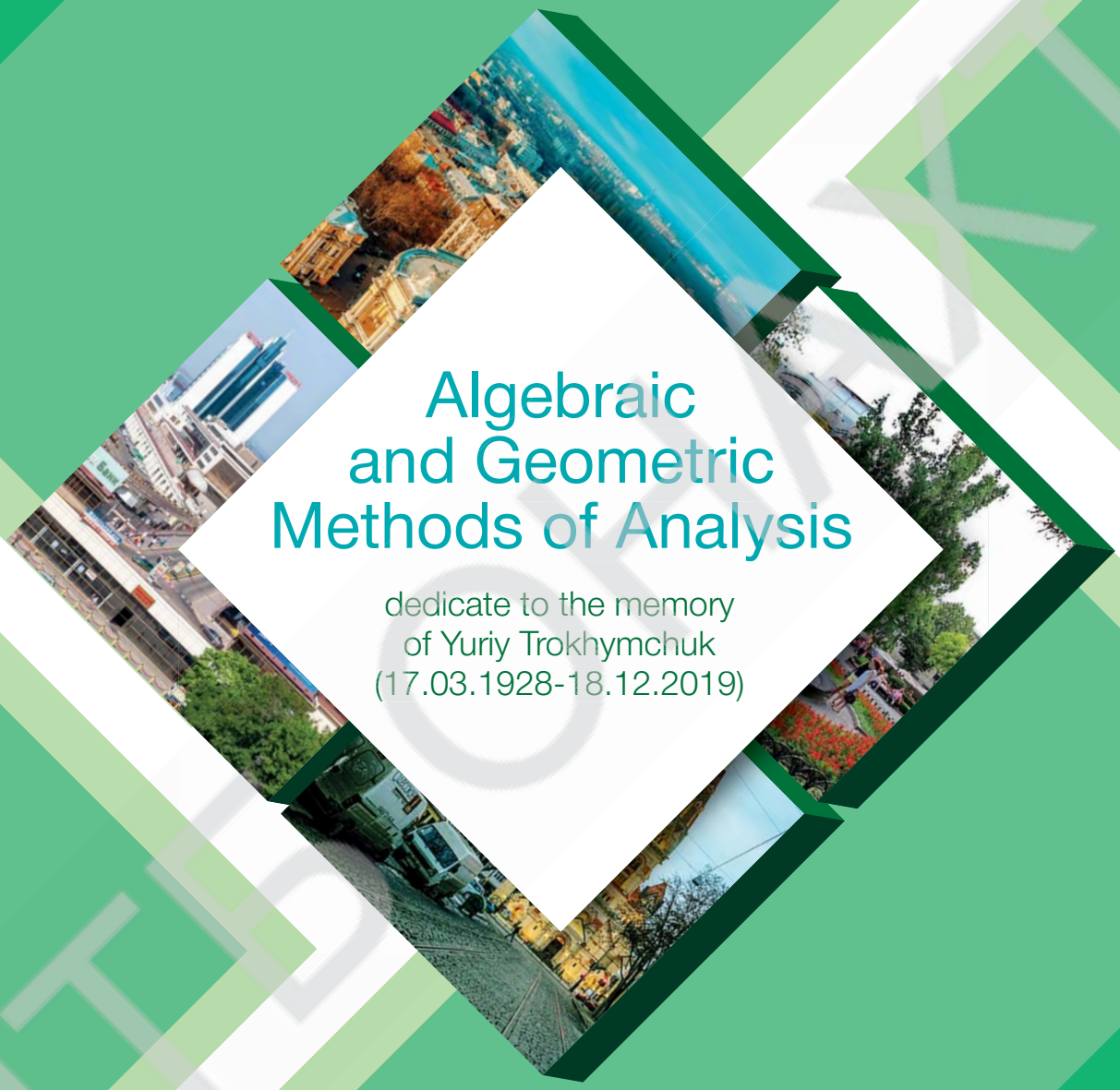

Algebraic and Geometric Methods of Analysis

dedicate to the memory
of Yuriy Trokhymchuk
(17.03.1928-18.12.2019)

May 25-28, 2021
Odesa, Ukraine

List of topics

- Topological methods in analysis
- Geometric problems of complex and mathematical analysis
- Algebraic methods in geometry
- Differential geometry in the whole
- Geometry and topology of differentiable manifolds
- General and algebraic topology
- Geometric and topological methods in natural sciences

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Every 2-dimensional Banach space has the Mazur-Ulam property

Taras Banakh
(Ivan Franko National University of Lviv)
E-mail: t.o.banakh@gmail.com

A Banach space X is defined to have the Mazur–Ulam property if for every Banach space Y every isometry $f : S_X \to S_Y$ between the unit spheres of X, Y extends to a linear isometry of the spaces X, Y. In 1987 Tingley posed a (still open) problem if every Banach space has the Mazur-Ulam property. It has been shown that many classical Banach spaces (like $C(K)$, $\ell_p(\Gamma)$, $L_p(\mu)$) do have the Mazur-Ulam property. The main result of the talk is the following solution of the Tingley problem in dimension 2.

Theorem 1. *Every 2-dimensional Banach space has the Mazur–Ulam property.*

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