INSTITUTUL DE MATEMATICĂ "SIMION STOILOW" AL ACADEMIEI ROMÂNE

Conferința lunară

Applications of Alexandrov's Gluing Theorem to Polyhedral Convex Surfaces

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Join Zoom Meeting

https://us02web.zoom.us/j/86422043246?pwd=eTBKaUxlSTlqanl4cEJSdWYxb1Q2UT09

Abstract: The goal of this talk is to briefly present, without technical details, applications of Alexandrov's Gluing Theorem to the geometry of polyhedral convex surfaces.

After recalling the above mentioned theorem, I will overview the topic of *unfolding* polyhedral convex surfaces. Then, I will talk about *flattening* such surfaces. In the last part, I will give recent results about *tailoring* polyhedral convex surfaces. Along the way, the *cut locus* will be defined, and its main properties introduced.

The talk is mainly based on several joint works, with Jin-ichi Itoh, Chie Nara, and Joseph O'Rourke.