

Emergent Research:

The PIMS Postdoctoral Fellow Seminar



Pacific Institute *for the*
Mathematical Sciences

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Spaces of geodesic triangulations of surfaces



ABSTRACT:

In 1962, Tutte proposed a simple method to produce a straight-line embedding of a planar graph in the plane, known as Tutte's spring theorem. It leads to a surprisingly simple proof of a classical theorem proved by Bloch, Connelly, and Henderson in 1984, which states that the space of geodesic triangulations of a convex polygon is contractible. In this talk, I will introduce spaces of geodesic triangulations of surfaces, review Tutte's spring theorem, and present this short proof. If time permits, I will briefly report the recent progress in identifying the homotopy types of spaces of geodesic triangulations of general surfaces.

Yanwen Luo

PIMS PDF, Simon Fraser University

SPEAKER BIO:

Yanwen Luo is a PIMS postdoc at Simon Fraser University and the University of Victoria. His mentors are Professor Bojan Mohar at SFU and Professor Ryan Budney at UVic. The main focus of his research lies in the field of discrete and computational geometry and topology. He obtained his Ph.D in 2020 at the University of California, Davis under the supervision of Professor Joel Hass.

For more information and registration:

<https://www.pims.math.ca/seminars/PIMSPDF>

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