

Institut für Diskrete Mathematik

## Combinatorics Seminar

Friday 25th March 14:15

Online meeting (Webex)

## Limits of Latin squares

FREDERIK GARBE

(Masaryk University)

We develop a limit theory for Latin squares, paralleling the recent limit theories of dense graphs and permutations. We introduce a notion of density, an appropriate version of the cut distance, and a space of limit objects – so-called Latinons. Key results of our theory are the compactness of the limit space and the equivalence of the topologies induced by the cut distance and the left-convergence. Last, using Keevash's recent results on combinatorial designs, we prove that each Latinon can be approximated by a finite Latin square.

This is joint work with Robert Hancock, Jan Hladký and Maryam Sharifzadeh.

Meeting link:

<https://tugraz.webex.com/tugraz/j.php?MTID=m40f85343e56ff5051d731ace1bea82e4>

Meeting number: 2731 089 0467

Password: btHRJxCa252

Joshua Erde, Mihyun Kang