PhD Colloquium

Florian Aigner:

An Introduction to Alternating Sign Matrices

(A Combinatorial Story of Missing Bijections)

Alternating sign matrices are combinatorial objects introduced roughly 35 years ago. Besides being very interesting in their own right and having various relations to statistical physics, the most intriguing fact about them is probably that they are known to be equinumerous to three further classes of combinatorial objects. However, there are no known bijections between any pairs of these classes of objects.

The aim of this talk is to introduce the audience to the research area of alternating sign matrices and to shed some light on what "missing bijections" actually means. As usual, no background will be assumed.

14. November, 15:00-15:45

SkyLounge, OMP-1