

Mathematik Kolloquium Innsbruck

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Measurable Combinatorics

We will discuss measurable versions of classical combinatorial problems (vertex/ edge colourings, matchings, etc) and their applications, such as to measurable circle squaring. The main object of study will be infinite graphs whose edge set is the union of finitely many measure-preserving matchings on a standard probability space. Such objects appear in various areas such as the limit theory of bounded-degree graphs, measure-preserving group actions, descriptive set theory, etc.

We will mostly concentrate on positive results, where one constructs a measurable function F that satisfies given combinatorial constraints (such as being a proper vertex colouring). Here, a powerful tool for constructing the desired function F is to design a parallel decentralised algorithm that converges to it almost everywhere.

Donnerstag 5. Oktober 2017, 17:00 Uhr, HSB 9 Tee und Kaffee ab 16:15 Uhr im Institut für Mathematik Gäste und Studierende sind herzlich willkommen!

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