

A U S H A N G

FREIE UNIVERSITÄT BERLIN Fachbereich Mathematik und Informatik

Promotionsbüro, Arnimallee 14, 14195 Berlin

DISPUTATION

Mittwoch, 27. September 2017, 14.15 Uhr

Ort: Seminarraum, Arnimallee 2, 14195 Berlin

Disputation über die Doktorarbeit von

Frau Katy Beeler

**Thema der Dissertation:
Polytopes with few coordinate values:
combinatorial types and diameter bounds**

**Thema der Disputation:
Choosability in planar graphs**

Die Arbeit wurde unter der Betreuung von **Prof. G. M. Ziegler, PhD** durchgeführt.

Abstract: Maryam Mirzakhani is best known for being the first female to win the Fields medal for her work on the dynamics and geometry of Riemann surfaces and their moduli spaces. However, she began her research career in graph theory with one of her earliest publications on graph choosability, a generalization of graph colorability. We say a graph is k -choosable if each vertex v receives a color from a prescribed list $L(v)$ of colors so that no two adjacent vertices have the same color. In this talk we will present the graph choosability conjecture made by Erdős that inspired Mirzakhani's work as well as the example she crafted to disprove it.

Die Disputation besteht aus dem o. g. Vortrag, danach der Vorstellung der Dissertation einschließlich jeweils anschließenden Aussprachen.

Interessierte werden hiermit herzlich eingeladen

Der Vorsitzende der Promotionskommission

Prof. G. M. Ziegler, PhD