



universität
wien

Fakultät für Mathematik

EINLADUNG

Mathematisches Kolloquium
und
Junior Kolloquium

Mittwoch, 17. Mai 2017

Sky Lounge

Antonio Cordoba (Ciudad Universitaria de Cantoblanco)

14:30 Uhr – Junior Kolloquium

„The Kakeya needle problem“

15.45 Uhr – Kaffeepause

16:15 Uhr – Vortrag

„Fractional power of Laplacians in Fluid Mechanics“

Anschließend vinum cum pane

Junior Kolloquium:

„The Kakeya needle problem“

Abstract:

The existence of plane sets whose measure is as small as we wish, but where a straight line segment (a needle) can be moved continuously to interchange its extreme points position, has become a central character in modern harmonic analysis, introducing many interesting and open problems.

Vortrag:

„Fractional power of Laplacians in Fluid Mechanics“

Abstract:

Fractional powers of Laplacians play an important role in the evolution of fluid interphases and atmospheric fronts. There are some useful, and to some extent surprising, new pointwise inequalities satisfied by those operators which help to understand the nature of several models in Fluid Mechanics, such as Hele-Shaw cells or the Muskat problem.

Herwig Hauser
Christian Krattenthaler