



universität
wien

Fakultät für Mathematik

EINLADUNG

**Mathematisches Kolloquium
und
Junior Kolloquium**

**Mittwoch, 28. Juni 2017
Sky Lounge**

David Smyth (Australian National University)

14:30 Uhr – Junior Kolloquium

„Introduction to Enumerative Geometry“

15.45 Uhr – Kaffeepause

16:15 Uhr – Vortrag

„Moduli Spaces in Algebraic Geometry“

Anschließend vinum cum pane

Junior Kolloquium:

„Introduction to Enumerative Geometry“

Abstract:

We will begin by giving a historical introduction to some of the key methods and ideas of algebraic geometry. In particular, we will introduce the idea of a moduli space, and see how classical enumerative problems in algebraic geometry can be interpreted and solved within the frame-work of "intersection theory on moduli spaces". If time permits, we will sketch how ideas from string theory have led to some extraordinary conjectures regarding intersection theory on a specific, very important moduli space, namely the moduli space of stable curves. No prior knowledge of algebraic geometry will be assumed.

Vortrag: „Moduli Spaces in Algebraic Geometry“

Abstract:

A basic aim of complex algebraic geometry is to describe and classify the shapes that arise as the solution sets of systems of polynomials equations. I will give a historical overview of various ways in which this aim has been interpreted over the years, culminating in a discussion of the fundamental problem of constructing and compactifying moduli spaces of polarized complex projective algebraic varieties. Finally, I will describe some specific open questions about the moduli space of projective algebraic curves (or compact Riemann surfaces). No prior knowledge of algebraic geometry will be assumed, and all are warmly encouraged to attend!

Michael Eichmair
Christian Krattenthaler