

# Colloquium

University of Notre Dame  
Department of Mathematics

David Smyth - The Australian National University

**Speaker:** David Smyth

The Australian National University



**Will give a lecture entitled**

Moduli Spaces in Algebraic Geometry

**Date:** Tuesday, January 17, 2017

**Time:** 4:00 PM

**Location:** 118 Nieuwland Science

**Departmental Tea:** Tea in Room 257 (lounge in Hurley Hall) at 3:30 p.m.

**Abstract:**

A basic aim of complex algebraic geometry is to describe and classify the shapes that arise as the solution sets of systems of polynomial 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!