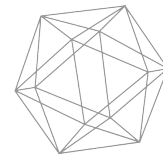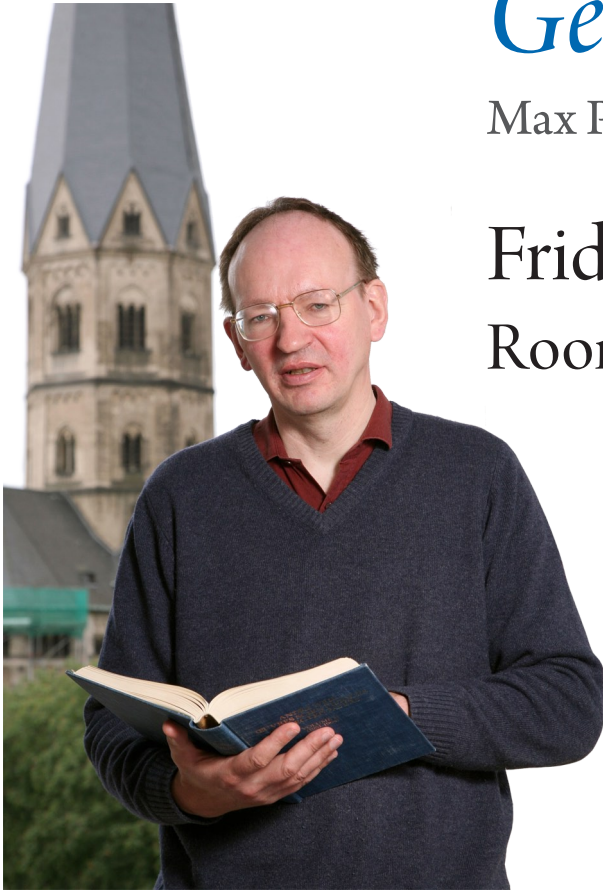# MAXWELL INSTITUTE COLLOQUIUM

Gerd Faltings

Max Planck Institute for Mathematics, Bonn

Friday, April 23, 2010 ✿ 4.00 PM
Room 6206, JCMB, King's Buildings

"Diophantine Geometry and Motivic Cohomology"

Abstract

"Minhyong Kim has invented a new method to prove finiteness of rational or integral points on curves. It uses results of Soulé on Galois cohomology. Replacing them with motivic cohomology, my student Hadian-Jazi has obtained some improvements. The purpose of the talk is to explain Kim's method and the improvement, as well as to explain what 'motivic cohomology' means and how it comes in."

An event sponsored by the

MAXWELL INSTITUTE *for* MATHEMATICAL SCIENCES

Prof. Faltings is a Fields medalist and winner of the Dannie Heineman Prize, the von Staudt Prize and the Leibniz Prize. He works in arithmetic algebraic geometry and proved famous conjectures by Mordell, Shafarevich and Tate. Prof. Faltings is a director of the Max Planck Institute for Mathematics in Bonn.

The **Maxwell Institute** is a joint venture of the University of Edinburgh and Heriot-Watt University, and it unites within a single body the activities of several research departments. It is part of the recently established *Edinburgh Research Partnership in Engineering and Mathematics.* Visit **www.maxwell.ac.uk** for details.