

# Mathematics Colloquium at IUB

MICHAEL POHST

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will speak

*On Polynomial Factorization*

**Date:** Monday, September 5, 2005  
**Time:** 17:15  
**Place:** Lecture Hall Research II, IUB

**Abstract:**

Analyzing well-known methods for factoring polynomials over the rationals, we generalize these methods to arbitrary global fields. The modular factorisation and the Hensel lifting are easy to transfer. For the retrieving of actual factors from a modular factorisation a suitable size function for the coefficients of potential factors is needed. It is obtained on the basis of lattice basis reduction. The methods are illustrated by detailed examples.

**Colloquium Tea** at ca. 16:45 in the Tea Room of Research II, close to the lecture hall. Everybody is welcome!