Mathematics Colloquium
at IUB

WINFRIED SICKEL
(Friedrich-Schiller-Universität Jena)
will speak

On the Regularity of Compositions of Functions

Date: Monday, April 24, 2006
Time: 17:15
Place: Lecture Hall Research II, IUB

Abstract:
We will talk about properties of the nonlinear composition (superposition) operator $T_f : g \to f \circ g$, where $g : \mathbb{R}^n \to \mathbb{R}$ is a measurable function belonging to some function space $F$ and $f : \mathbb{R} \to \mathbb{R}$ is at least continuous. As it is clear from the very beginning, the properties of $T_f$ will strongly depend on the domain of definition. In our talk we will concentrate on the situation where $F$ is a Sobolev space, but some remarks will be given also to the case of smoothness of fractional order.

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