



Einladung zu einem Vortrag im Seminar  
Materialwissenschaften und Mathematik

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spricht zum Thema

### Cementitious nanostructure: A challenge for modellers !

**Zeit:** Donnerstag, den 25. November 2010, 16.00 Uhr

**Ort:** Wegelerstrasse 6, Seminarraum 5.002

gez. Prof. Dr. Michael Griebel, Prof. Dr. Stefan Müller

**Abstract:** Cement-based materials are the most employed materials by mankind, only behind water. They are indeed complex composite materials with truly multi-scale internal structures that evolve over centuries. Though aspects like cohesion and durability (both of which play a crucial role in the in-service performance of these materials) are governed by processes occurring at the nanoscale, cementitious nanostructure is unfortunately not fully understood. Computational techniques are currently employed to shed some light on their complicated nanostructure and even to design new materials with improved nanostructure. This lecture aims to discuss some of the challenges for mathematical modeling we have towards the endeavour of understanding and tailoring the nanostructure of such relevant materials.