



Invitation to Seminar Talk

The dynamic Φ^4_2 theory - global well posedness and particle approximations

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Host: Jan Maas

In this talk I will discuss the dynamic Φ^4 model in two (spatial) dimensions. This model is formally given by a reaction diffusion equation driven by an additive space-time white noise. It is well-known that such equations are distribution valued and a Wick renormalisation has to be performed in order to define the non-linear term. Formally, this renormalisation corresponds to adding an infinite mass term to the equation.

I will explain how to perform this renormalisation procedure and present an existence and uniqueness result on the plane \mathbb{R}^2 . Then I will explain how to obtain the Φ^4 equation as a scaling limit for a ferromagnetic Ising model with non-local (Kac type) interaction near the critical temperature.

This is joint work with J.C. Mourrat.

Thursday, April 16, 2015, 4:00pm

Seminar room Mondi 2, Central Building, 1st floor



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage (note that the IST Shuttle times are highlighted in dark green):
http://ist.ac.at/fileadmin/user_upload/pdfs/IST_shuttle_bus.pdf
The IST Shuttle bus is marked IST Shuttle (#242) and has the Institute Logo printed on the side.