

SALZBURG MATHEMATICS COLLOQUIUM

Summer 2018

Dietmar Hömberg (Berlin)

„European collaboration in industrial and applied mathematics“

May 17, 2018

Abstract:

In the first part of my presentation I will give an overview of recent activities of the mathematics community for a European collaboration in Industrial and Applied Mathematics. After a short review of mission and interaction of key institutions like ECMI and EU-MATHS-IN, I will discuss activities and funding opportunities of the Cost Action “Mathematics for industry network (MI-NET)”. In the second part of my talk I will present some scientific results from the European Industrial Doctorate network “MIMESIS- Mathematics and Materials Science for Steel Production and Manufacturing” related to induction heating problems. The common basis is a multi-field model coupling a diffusive Maxwell system in time domain with the energy balance. I will address questions regarding qualitative analysis of the coupled system and an efficient numerical treatment and conclude with some numerical results related to steel manufacturing.

Thursday, **15:00-15:45**

Hörsaal 414, 1. Stock