

# SALZBURG MATHEMATICS COLLOQUIUM

Summer 2017

Ulrich Langer (Linz)

## „Multi-patch discontinuous Galerkin space and space-time Isogeometric Analysis “

March 30, 2017

Abstract:

In the first part of the talk, we introduce and investigate multi-patch discontinuous Galerkin (dG) Isogeometric Analysis (IgA) approximations to elliptic heterogeneous diffusion problems. In the second part, we present and analyze new stable single-patch and multi-patch space-time IgA method for the numerical solution of parabolic diffusion problems in fixed and moving spatial computational domains. The research work presented in this talk is a joint work with C. Hofer, S. Moore, M. Neumüller and I. Touloupoulos, and has been supported by the Austrian Science Fund (FWF) under the grant NFN S117-03. For more information see the extended abstract available at the web page mentioned below.

Thursday, **15:00-15:45**  
Hörsaal 414, 1. Stock