

Prof. Marco Picasso Mathematics Institute of Computational Science and Engineering - MATHICSE

SEMINAR OF NUMERICAL ANALYSIS

> WEDNESDAY 20 MARCH 2013 - ROOM CH B3 31 - 16h15

Dr. David Knezevic, (Harvard University, Cambridge / USA) will present a seminar entitled:

"A Component-Based Reduced Basis Method for Many-Parameter Systems"

Abstract:

We present a reduced basis method that combines standard reduced basis approximations with a static condensation formulation. This allows standalone parametrized Reduced Basis Components to be developed. The Reduced Basis Components can be connected to assemble a wide variety of systems, which leads to a significant increase in modeling flexibility compared to conventional Reduced Basis approximation. We demonstrate the methodology with numerical results drawn from applications in structural analysis and acoustics.

Lausanne, 6 March 2013/DK/cr

The seminars taking place at the Section of Mathematics are announced on internet address: www http://mathicse.epfl.ch/seminars