

# CONFERENCE PROGRAM

## Reliable Methods of Mathematical Modeling University of Jyväskylä, Finland July 1-3, 2013

### Day 1. July 1, 2013

Chair P. Neittaanmäki

10 <sup>00</sup> – 10 <sup>10</sup>	P. Neittaanmäki. Opening
10 <sup>10</sup> – 11 <sup>00</sup>	D. Braess <i>A posteriori error estimates for discontinuous Galerkin methods by equilibration</i>
11 <sup>00</sup> – 11 <sup>20</sup>	Coffee break

Chair D. Braess

11 <sup>20</sup> – 11 <sup>50</sup>	M. Feischl <i>Quasi-optimal adaptive FEM for non-symmetric operators</i>
11 <sup>50</sup> – 12 <sup>20</sup>	O. Mali <i>Measures for the performance of error indicators</i>
12 <sup>30</sup> – 13 <sup>30</sup>	Lunch

Chair S. Sauter

13 <sup>30</sup> – 14 <sup>20</sup>	R. Stevenson <i>Instance optimality of the adaptive maximum strategy</i>
14 <sup>20</sup> – 15 <sup>00</sup>	S. Tomar <i>Guaranteed and sharp a-posteriori error estimates in isogeometric analysis</i>
15 <sup>00</sup> – 15 <sup>30</sup>	Coffee break

Chair R. Stevenson

15 <sup>30</sup> – 16 <sup>00</sup>	K. Köhler <i>Non-conforming finite element methods for the obstacle problem</i>
16 <sup>00</sup> – 16 <sup>30</sup>	A. Springer <i>Higher order adaptive time discretization for parabolic optimal control problems</i>
16 <sup>30</sup> – 17 <sup>00</sup>	S. Matculevich <i>Computable estimates of the distance to the exact solution of the evolutionary equation</i>
17 <sup>00</sup>	Welcome reception

### Day 2. July 2, 2013

Chair S. Repin

10 <sup>00</sup> – 10 <sup>50</sup>	S. Sauter <i>The saturation property for p-refinement</i>
10 <sup>50</sup> – 11 <sup>20</sup>	F. Hecht <i>A posteriori error estimates for discontinuous Galerkin methods by equilibration</i>
11 <sup>20</sup> – 11 <sup>50</sup>	Coffee break

Chair S. Tomar

11 <sup>50</sup> – 12 <sup>20</sup>	T. Samrowski <i>Estimates of modelling errors for linear elliptic problems</i>
12 <sup>20</sup> – 12 <sup>50</sup>	F. Gaspoz <i>AFEM for PDE constrained Dirichlet optimal control</i>
12 <sup>50</sup> – 13 <sup>20</sup>	M. Frolov <i>Efficient implementation of the functional approach to a posteriori error estimation for linear elasticity based on Arnold-Boffo-Falk approximation</i>
13 <sup>20</sup> – 13 <sup>50</sup>	M. Nokka <i>TBD</i>
13 <sup>50</sup> – 14 <sup>50</sup>	Lunch
15 <sup>00</sup> – 16 <sup>30</sup>	Bus excursion in Jyväskylä
17 <sup>00</sup> – 19 <sup>00</sup>	Sauna and/or refreshments
19 <sup>00</sup> – 21 <sup>00</sup>	Dinner

**Day 3. July 3, 2013**

Chair O. Mali

- 10<sup>00</sup> – 10<sup>50</sup> O. Pironneau  
*Difficult Computational Encounters in Hemodynamics*  
10<sup>50</sup> – 11<sup>40</sup> Y. Kuznetsov  
*TBA*  
11<sup>40</sup> – 12<sup>10</sup> Coffee break

Chair Y. Kuznetsov

- 12<sup>10</sup> – 13<sup>00</sup> S. Repin  
*On mathematical methods generating fully reliable a posteriori estimates for non-linear boundary value problems*  
13<sup>00</sup> – 13<sup>30</sup> T. Saksa  
*A unified continuum model problem: a flow of a continuous plate through a box*  
14<sup>00</sup> – 15<sup>00</sup> Lunch  
15<sup>00</sup> – 15<sup>10</sup> Closing