
EMPLOYMENT

- Inria** Paris, research group ALPINES **March 2017** –
postdoc position in team of professor Laura Grigori
- Institute of Computer Science**, Czech Academy of Sciences **October 2011** –
student position in Department of Computational Methods

EDUCATION

- Faculty of Mathematics and Physics, Charles University, Prague**
advisor: professor Zdeněk Strakoš
- Ph.D.** in Scientific Computing **2017**
thesis: *Algebraic error in matrix computations in the context of numerical solution of partial differential equations*
- Master** in Numerical and Computational Mathematics (summa cum laude) **2011**
Estimation of the algebraic error and stopping criteria in numerical solution of partial differential equations
- Bachelor** in General Mathematics (summa cum laude) **2009**
Estimation of the energy and Euclidean norms of the error in the conjugate gradient method
- Université Pierre et Marie Curie, Paris** **January – May 2013**
ERASMUS internship, supervised by professor Martin Vohralík
- Gene Golub SIAM Summer School 2013**, Fudan University, Shanghai **July 2013**
topic: Matrix Functions and Matrix Equations, duration 3 weeks

PARTICIPATION ON GRANTS

- ERC-CZ project LL1202 **2012 – 2017**
MORE: MODelling REvisited + MOdel REDuction
member of the project team; principal investigator: prof. Josef Málek
- GAČR project 13-06684S **February 2013** –
Iterative Methods in Computational Mathematics: Analysis, Preconditioning, and Applications
member of the project team; principal investigator: prof. Miroslav Tůma
- GAUK student research grant 695612 **2012 – 2014**
principal investigator (team of 3 students)
- GAAV grant IAA100300802 **2009 – 2012**
Theory of Krylov subspace methods and its relationship to other mathematical disciplines
member of the project team; principal investigator: prof. Zdeněk Strakoš

PROFESSIONAL ACTIVITIES

- Charles University in Prague Chapter of SIAM **July 2012 – June 2015**
president
- Programming in MATLAB workshop **2012, 2014, 2016**
organizer and lecturer of one-week intensive courses

TEACHING EXPERIENCE

- Fundamentals of Numerical Mathematics – exercise (0+2) winter semesters **2014/15, 15/16**
Charles University in Prague, NMNM201

AWARDS

- SIAM Student Chapter Certificate of Recognition **2014**
awarded by the Society for Industrial and Applied Mathematics (SIAM)
- prof. Babuška prize, 2nd place **2012**
awarded by the Czech Society for Mechanics

PUBLICATIONS

- J. Papež, J. Liesen, and Z. Strakoš: *Distribution of the discretization and algebraic error in numerical solution of partial differential equations*, Linear Algebra Appl., 449, 2014, pp. 89-114.
- J. Papež and Z. Strakoš: *On a residual-based a posteriori error estimator for the total error*, preprint MORE/2016/14, (in revision).
- J. Papež, Z. Strakoš, and M. Vohralík: *Estimating and localizing the algebraic and total errors in numerical PDEs using the flux reconstruction*, preprint MORE/2016/12, (in revision).
- J. Papež, U. Rűde, M. Vohralík, and B. Wohlmuth: *Sharp algebraic and total a posteriori error bounds via a multilevel approach*, (in preparation).

CONTRIBUTED PRESENTATIONS (selected)

- 20th ILAS Conference, Leuven **July 2016**
talk: *Estimating and localizing the algebraic and total numerical errors using flux reconstruction*
- SIAM Conference on Applied Linear Algebra, Atlanta **October 2015**
Bounds on algebraic, discretization, and total numerical errors for linear diffusion PDEs
- 26th Biennial Numerical Analysis Conference, Glasgow **June 2015**
Interpretation of the algebraic error in numerical solution of PDEs
- Modeling, analysis and computing in nonlinear PDEs, Liblice **September 2014**
Interpretation of the algebraic error and algebraic preconditioning as the transformation of the discretization basis
- 85th GAMM Annual Meeting, Erlangen **March 2014**
Spatial distribution of errors in numerical solution of PDE model problems
- ENUMATH 2013, Lausanne **August 2013**
Distribution of the algebraic, discretization and total errors in numerical PDE model problems

LANGUAGE SKILLS

- Czech** native
English fluent
French beginner

OTHER SKILLS

- MATLAB**, **C++** (basics), **Python** (basics)