
EMPLOYMENT

- Inria Paris**, research group ALPINES March 2017 –
postdoc position in team of professor Laura Grigori
- Institute of Computer Science**, Czech Academy of Sciences 2011 – 2017
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 2013 – 2017
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)
- Babuška Prize for diploma thesis, 2nd place **2012**
awarded by the Czech Society for Mechanics

PUBLICATIONS

- J. Papež and Z. Strakoš: *On a residual-based a posteriori error estimator for the total error*, IMA J. Numer. Anal., 2017, doi: 10.1093/imanum/drx037
- J. Papež, Z. Strakoš, and M. Vohralík: *Estimating and localizing the algebraic and total errors in numerical PDEs using the flux reconstruction*, Numer. Math., 2017, doi: 10.1007/s00211-017-0915-5
- 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, U. Růde, M. Vohralík, and B. Wohlmuth: *Sharp algebraic and total a posteriori error bounds for hp finite elements via a multilevel approach*, submitted for publication in December 2017, HAL Preprint 01662944.
- J. Papež, L. Grigori, and R. Stompor: *Solving linear equations with messenger-field and conjugate gradient techniques — an example of CMB data analysis*, (in preparation).

CONTRIBUTED PRESENTATIONS (selected)

- Implicitly constituted materials: Modeling, Analysis and Computing, Rožtoky **August 2017**
talk: *Algebraic error and a posteriori error estimation in numerical PDEs*
- 20th ILAS Conference, Leuven **July 2016**
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**, **Python** (basics), **C++** (basics)