



# COMPUTERS & MATHEMATICS WITH APPLICATIONS

An International Journal

## AUTHOR INFORMATION PACK

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### DESCRIPTION

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*Computers & Mathematics with Applications* provides a medium of exchange for those engaged in fields contributing to building successful **simulations** for **science** and **engineering** using **Partial Differential Equations** (PDEs).

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**Nilima Nigam**, Simon Fraser University, Burnaby, British Columbia, Canada

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**Fabio Nobile**, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland

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Adaptive meshing, parallel computing, uncertainty quantification, linear system solvers, domain decomposition theory, geophysical modeling, scientific

**Jorg Peters**, Dept. of CISE, University of Florida, CSE Building, Gainesville, FL 32611-6120, USA

Impact of geometry on PDEs (eg. representation and shape of boundary surfaces); higher order isoparametric methods (reparameterization on 'physical domains'); (interactive) simulation of tissue

**Ernesto Prudencio**, University of Texas at Austin, Austin, Texas, USA

Uncertainty quantification, Bayesian analysis, Markov chain Monte Carlo, Bayesian filtering, optimal design of experiments, model emulation with Gaussian processes, rare events, validation, domain decomposition, multigrid, preconditioners, inverse problems, scalable parallel numerical and statistical algorithms for large scale computational problems, software design of mathematical libraries

**Serge Prudhomme**, Polytechnique Montreal, Montréal, Quebec, Canada

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**Joachim Schöberl**, Technische Universität Wien, Wien, Austria

High order finite elements, mixed finite elements, preconditioning, Maxwell equations.

**Raul Tempone**, King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia

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Discontinuous Galerkin methods; computational time-domain acoustic, electromagnetic and elastic wave scattering; parallel and GPU/many-core computing.

**Zohar Yosibash**, Ben Gurion University of the Negev, Beer Sheva, Israel

computational biomechanics, high-order FEMs, singularities in elliptic PDEs, numerical analysis of nonlinear elliptic PDEs, fracture mechanics

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[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59.

Reference to a book:

[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[4] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13 March 2003).

Reference to a dataset:

[dataset] [5] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

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