Valeria Simoncini

Curriculum Vitae

(November 25, 2019)

Address:

Dipartimento di Matematica - Alma Mater Studiorum Università di Bologna Piazza di Porta S. Donato, 5 40127 Bologna, Italy Tel. 051-2094429 Fax 051-2094490 valeria.simoncini@unibo.it http://www.dm.unibo.it/~simoncin

Monograph

A Guide to Empirical Orthogonal Functions for Climate Data Analysis, NAVARRA, ANTONIO, SIMONCINI, VALERIA, Springer. ISBN: 978-90-481-3701-5 March, 2010, pp. 200.

Publications in Refereed International Journals Most cited:

- Recent computational developments in Krylov subspace methods for linear systems. V Simoncini, DB Szyld. Numerical Linear Algebra with Applications 14 (1), 1-59 (2007).

- A family of mimetic finite difference methods on polygonal and polyhedral meshes. F Brezzi, K Lipnikov, V Simoncini. Mathematical Models and Methods in Applied Sciences 15 (10), 1533-1551 (2005).

- A new iterative method for solving large-scale Lyapunov matrix equations. V Simoncini. SIAM Journal on Scientific Computing 29 (3), 1268-1288 (2007).

(plus over 100 other journal publications, not listed)

BIBLIOMETRIC DATA (as of Nov 25, 2019):

Scopus: H-index: 28, Sum of the Times Cited: 3078 (without self-citation: 2838)

Google Scholar: H-index(all): 40, i10-index(all): 83, Citations(all): 6173.

H-index (2014-): 32, i10-index(2014-): 71, Citations (2014-): 3247

Employment and Education

Associate (1/11/2000-31/10/2010) and Full (1/11/2010-) Professor, Università di Bologna

Researcher at Istituto di Analisi Numerica (IAN) of CNR, Pavia (may 96- oct. 00)

Researcher at Istituto di Metodologie Geofisiche Ambientali (IMGA) of CNR, Modena (feb 95- jan. 96)

Visiting Scholar, CSRD, University of Illinois at Urbana-Champain, Illinois (1991-1993)

Dottore di Ricerca (PhD) in Matematica Computazionale ed Informatica Matematica (sept. 1994) at the Dipartimento di Matematica Pura ed Applicata of the Università degli Studi in Padova. Title of Thesis: Sulla risoluzione ed applicazione di sistemi lineari con più vettori noti.

Dottore in Matematica (nov. 1989) with laude at the Università degli Studi in Bologna.

Teaching activity

Courses periodically taught within the Math or Environmental Science Programs (Undergraduate (ug) and Master(m)) at the University of Bologna: Calculus I (ug, 8 CFU), A Basic Course in Statistics (ug, 3 CFU), Applied Multivariate Statistical Analysis (m, 6 CFU), Numerical Methods for Environmental Science (m, 4 CFU), Numerical Computations (ug, 10 CFU), Numerical Analysis (m, 6 CFU). Courses periodically taught within the PhD Program in Mathematics and short courses in other Institutions: "Iterative Methods for linear systems", "Matrices Analysis".

Adviser of Master and PhD theses:

Niklas Fors (Master of Science Program in Engineering Physics, Uppsala University, 2007); Marina Popolizio (Università di Bari, 2008); Gianluca Barbella (Politecnico di Milano, 2009); Yiding Lin (co-adviser, Xiamen University, China, 2014); Stephen Shank (co-adviser, Temple University, Philadelphia, USA, 2014); Mattia Tani (Università di Bologna, 2015) Davide Palitta (Università di Bologna, 2018) Gerhard Kirsten (Università di Bologna, 2021) Domitilla Brandoni (Università di Bologna, 2021)

Awards

SIAM Fellow, Society of Industrial and Applied Mathematics, Philadelphia, USA.

Scientific Activities and Reviews

Member Edit. Board for Journal of Numerical Mathematics (9/2014-) 2014 WoS ranking: 10/257
Member Edit. Board for ESAIM: Math. Modelling and Numerical Analysis (M2AN) (1/2013-) 2014 WoS ranking: 28/257
Member Edit. Board for SIAM J. Numerical Analysis (1/2012-) 2014 WoS ranking: 22/257
Member Edit. Board for ETNA - Electronic Transactions Numerical Analysis (3/2009-9/2014)
Member Edit. Board for SIAM J. Matrix Analysis and Appl. (1/2005-) 2014 WoS ranking: 33/257
Member Edit. Board for Numerical Linear Algebra with Applications (4/2000-) 2014 WoS ranking: 55/257
Member SIAM Council (2020-2022)
Member Board of Directors ILAS (3/2019-)
Member Advisory Committee for the SIAM Int'l Summer School on Numerical Linear Algebra (2010-)
Chair SIAM Activity Group in Linear Algebra (2019-2020)
Member Permanent Scientific Committee of the Householder Symposium (6/2008-)
Member of the Italian CIME Committee (2017-)
Member of several international election and prize committees

Research Fellow of IMATI-CNR (Pavia)

Referee for the evaluation of National and International Projects (CIVR, NSF, NWO, ...) and Promotion evaluations. Panel member in the Mathematics section of the National Scientific Evaluation of Universities (ANVUR-VQR), 2011-2013. Member of the ASN National Committee (2018-2020)

Organizing Activities in Conferences, Workshops and Schools (past 5 years)

Co-organizer, (with Michele Benzi) CIME Summer School, Exploiting Hidden Structure in Matrix Computations. Algorithms and Applications, Cetraro, June 21-26, 2015 Organizer, Workshop on Matrix Equations and Tensor Techniques", Bologna, 21-22 Sept. 2015. <u>Member</u> of the Scientific Committee of ENUMATH, Bergen, September 2017 <u>Member</u> of the Scientific Committee of Congresso UMI, Pavia September 2019 <u>Member</u> of the Scientific Committee of ENUMATH, Egmond aan Zee (NL), October 2019 <u>Member</u> of the Scientific Committee of Congress of the European Math Society, Portoroz July 2020

(plus organization of a number of mini-symposia at Conferences)

Bologna, November 25, 2019

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