Marco Lapegna Short Curriculum Vitae

(update sept. 2015)

Contact Information

Department of Mathematics and Applications
University of Naples “Federico II”
via Cintia, Monte S. Angelo - 80126 Naples, Italy

marco.lapegna@unina.it
http://wpage.unina.it/lapegna
google scholar page: http://scholar.google.it/citations?user=ay0IOsAAAAAJ

Professional Experience

Marco Lapegna received the degree in Mathematics in 1987 and the Ph.D. in Applied Mathematics and Computer Science in 1991, from the University of Naples “Federico II”. He held an appointment as visiting student at the Mathematics and Computer Science Division of the Argonne National Laboratory in 1990. He become Assistant Professor in Numerical Analysis at University of Naples “Federico II” in 1991, and Associate Professor in 2001. From 2014 is associate professor in Computer Science.

Research Interests

- Parallel, distributed and grid computing
- Parallel algorithms for high performance data structure
- Software environments for High Performance Computing
- Parallel algorithms for computational mathematics with special regard to multidimensional quadrature

Participation to Recent Research Project

- RECAS funded by the European Commission (2007-2013). The project has two main parts: infrastructures and training. The first one is aimed to harmonize the several grid and cloud Italian projects. The second ones is aimed to train a generation of young technicians and scientist in the field of grid and cloud computing.
- EGEE III. funded by the European Commission (2008-10). The project has two clear objectives that are essential for European research infrastructures: to expand, optimize and simplify the use of Europe's largest production Grid by continuous operation of the infrastructure, support for more user communities, and addition of further computational and data resources; to prepare the migration of the existing Grid from a project-based model to a sustainable federated infrastructure based on National Grid Initiatives.

– SCOPE funded by the MIUR - National Ministery of Education and Research (2005-2008). The aim is the development of a High Performance Computing system for the deployment of multidisciplinary grid aware applications.

Teaching Activity

- Programming with laboratory* (mathematics degree)
- Operating systems* (computer science degree)
- Parallel and distributed computing (computer science degree)

* available also on the web-learning platform www.federica.unina.it

Other Professional Activities

- Chairman of the Board of Mathematics Degree, University of Naples Federico II (from 2008)
- Elected member of the Academic Senate of the University of Naples Federico II (from 2008 until 2013)
- Member of the Board of Computational and Informatics Sciences Doctorate, University of Naples Federico II (from 2010 until 2013)
- Program committee member of the Parallel Numerics (PARNUM) conferences (2003 and 2005), Parallel Processing and Applied Mathematics (PPAM) conferences (from 2007), IEEE International Conference on High Performance Computing and Communications (HPCC) conference (2011, 2012)
- Referee for international journals and conferences

Last 5 years peer reviewed publications

- R. Montella, G. Giunta, G. Laccetti, M. Lapegna, C. Palmieri, C. Ferraro, V. Pelliccia - Virtualizing CUDA enabled GPGPUs on ARM clusters – in press
- G. Laccetti, M. Lapegna, V.Mele - A loosely coordinated model for heap-based priority queues in multicore environments – in press
- S. Celestino, G. Laccetti, M. Lapegna, D. Romano- A bidirectional path tracing method for global illumination rendering on GPU - Applied Mathematical Sciences, Vol. 8, (2014), no. 135, 6783-6790,
- G. Laccetti, M. Lapegna,V. Mele, D. Romano - A study on adaptive algorithms for numerical quadrature on heterogeneous multicore and GPU based systems – Lecture Notes in Computer Science vol. 8384 (2014), pp. 704-713,
- G. Laccetti, M. Lapegna, V. Mele, D. Romano, A.Murli - A Double Adaptive Algorithm for Multidimensional Integration on Multicore Based HPC Systems – International Journal on Parallel Programming, vol. 40 (2012) pp. 397-409
- V. Boccia, L. Carracciuolo, G. Laccetti, M. Lapegna, V. Mele - HADAB: enabling fault tolerance in parallel applications running in distributed environments –Lecture Notes in Computer Science, vol. 7203 (2012), pp. 700-709
- G.Laccetti, M.Lapegna, V. Mele, D. Romano - Some Performance Issues on Linear Algebra Algorithms in Distributed and Grid Computing Environments - Advances in Computer Science and Engineering, vol. 6 (2011), pp. 181-197