**Gabriella Anna Puppo**

**CURRICULUM VITAE (AI FINI DELLA PUBBLICAZIONE)**

# 1 General Information

Full Name: Gabriella Anna Puppo

# 2 Education

**2017** Abilitazione Scientifica Nazionale a Professore di Prima Fascia, settore concorsuale 01/A5, SSD MAT08, (Qualification as full professor in Numerical Analysis), August 2nd, 2017.

**2006** Idoneità Professore di Seconda Fascia, settore concorsuale 01/A5, SSD MAT08, (Qualification as associate professor in Numerical Analysis), from Università di Bologna, April 12th, 2006.

**1990** Ph.D. in Applied Mathematics, Courant Institute of Mathematical Sciences, New York University, New York, U.S.A.

**1988** Master in Applied Mathematics, Courant Institute of Mathematical Sciences, New York University, New York, U.S.A..

**1984** Laurea in Physics (110/110 e lode), from Università degli Studi di Milano.

# 3 Appointments

**2012- present** Associate professor in Numerical Analysis, Department of Science and High Technology, Università dell'Insubria, Como.

**2006-2012** Associate professor in Numerical Analysis, Department of Mathematics, Politecnico di Torino.

**1990-2006** Assistant professor (ricercatore) in Numerical Analysis, Department of Mathematics, Politecnico di Torino.

**1985-1990** Research and Teaching Assistant, Courant Institute of Mathematical Sciences, New York University, New York, U.S.A..

**1984-1985** Scientific consultant to ARS (ENI group).

# 4 Teaching experience

Here is a list of the courses I taught, separated for each level of education of the Italian system.

**Dottorato (PhD level)**

**2015** Kinetic modeling, PhD program in Mathematics of Computing, Università dell'Insubria, Como.

**2009-2012** Mesoscopic Numerical Methods, PhD School of the Politecnico di Torino.

**2004-2005** Numerical Methods for Conservation Laws, PhD School of the Politecnico di Torino.

**2003** Numerical Methods for Conservation Laws, PhD School of the University of Milano.

I have already tutored 3 PhD theses in Mathematics, and I am currently tutoring three PhD students.

**Laurea Magistrale (Master level)**

**2013- present** Numerical Methods for PDE's, B (Finite Element methods for elliptic and parabolic equations), starting 2013 and every other year, Mathematics and Physics students, Università dell'Insubria, Como.

**2014-present** Numerical Methods for PDE's, A (Finite Volume methods for hyperbolic equations), starting 2014 and every other year, Mathematics and Physics students, Università dell'Insubria, Como.

**2015** Introduction to hyperbolic equations and their numerical integration, Math and Physics students, University of Würzburg, within the Prodi Chair appointment.

**September 2015** Traffic models and Conservation Laws, Minicourse for Math Students, Linneus University, Vaxjo, Sweden.

**2005-2012** Metodi Numerici e Calcolo Scientifico (Numerical Methods and Scientific Computing), Astrophysics engineering students, Politecnico di Torino.

**2003-2004** Calcolo numerico (Numerical Computing), for students in Electronic engineering, Politecnico di Torino.

I have tutored at least 7 master level theses, 2 in Mathematics, 1 in Physics and 4 in Astrophysical Engineering.

**Laurea Triennale (Batchelor level)**

**2012- present** Istituzioni di Analisi Numerica, (Fundamentals of Numerical Analysis), Laurea in Mathematics, Università dell'Insubria, Como.

**2006-2010** Probabilità e Statistica and Probability and Statistics, Italian and foreign students in electronic engineering, Politecnico di Torino.

**2001-2006** Calcolo numerico (Numerical Computing) for electronic and TLC engineering students, Politecnico di Torino.

**1990-2000** Exercise sessions for Analisi 2 (Analysis), Numerical Computing, Calculus (Istituzioni di analisi per architetti), Probability and Statistics, Politecnico di Torino.

I have tutored approximately 15 Batchelor level theses, in Mathematics, and Astrophysical Engineering.

# 5 Awards and invitations for scientific collaboration

I have spent several periods abroad for scientific collaborations, at the Universities of Würzburg, Nice, Bordeaux, Orleans, and RWTH at Aachen.

**2015, 1 semester** Prodi Chair in Mathematics, issued by Department of Mathematics, University of Würzburg.

# 6 Funding and Conference organization

**2016 - 2018** DAAD Project for exchanges of researchers between the Universities of Insubria and Würzburg.

**2015 - present** Proposal and organization of "Giornata di Dipartimento", a one-day yearly event, in which all different research areas present in the Department are invited to present their research activity. The purpose is to promote cross-fertilization between Mathematics, Physics, Chemistry and Environmental Sciences.

**2014 - 2017** Atheneum (FAR) yearly funding, issued on a meritocratic basis.

**2012 - 2018** Participation to GNCS research projects.

**2015 - 2016** Member of the Scientific Committee of the International Conference on Hyperbolic Problems: Theory, Numerics and Applications.

**2015** INDAM funding for organization of INDAM workshop in Cortona, NUMHYP2015 (Numerical Methods for Hyperbolic systems with source terms and applications).

**2015 - 2020** Member of Marie Curie action ITN ModCompShock.

**2001 - 2003** Principal Investigator for the Local Unit of the Department of Mathematics for project COFIN-MURST 2001.

**1999 - 2001** Principal Investigator for the Local Unit of the Department of Mathematics for project COFIN-MURST 1999.

# 7 Research activity

**Research interests**
Numerical integration of partial differential equations, in particular of hyperbolic kind. Finite differences and finite volume methods for conservation and balance laws, with particular emphasis on stiff problems and high order methods. Numerical preservation of equilibria and close to equilibrium solutions, asymptotic preserving properties on reduced models.

Noise reduction in Monte Carlo schemes, numerical integration of stiff kinetic models. Adaptive schemes: development of error indicators for the construction of adaptive grids, domain decomposition methods for multiscale kinetic problems. Spectral methods with stabilization of convection diffusion problems. Vortex methods in incompressible fluid dynamics.

Multiscale models and numerical methods in applied mathematics and mathematical physics: study and development of kinetic models and their stiff limits, models for vehicular traffic flows and for mixtures of gases and particles.

**Research analytics**
I have authored or co-authored more than fifty scientific publications, appeared on the best international journals of the field: J. Comp. Phys, SIAM J. Scientific Computing, J. Scientific Computing, SIAM J. of Numerical Analysis, Communications in Computational Physics, Communications in Mathematical Sciences, Kinetic and Related models.

The following Table summarizes the results. A dash indicates that that particular information is not available on that particular data base.

| | Scopus | WOS | MathScinet | Google Scholar |
|---|---|---|---|---|
| Total works | 36 | 43 | 52 | 65 |
| Total articles | 31 | 30 | - | - |
| Total Citations | 846 | 752 | 520 | 1778 |
| without self-citations | 726 | 687 | - | - |
| Average citations per publication | 23.5 | 17.5 | 10 | 27.3 |
| $h$-index | 12 | 12 | 10 | 16 |

- Referee for the best Numerical Analysis and Scientific Computing Journals, as SIAM J. Num. An., SIAM J. Sci. Comp., J.Comp.Phys., Num. Math., J. Sci. Comp.
- Referee for ERC projects.

# 8 Selected Publications

I list the 15 publications selected for the committee's evaluation. For all, I specify, respectively, all bibliographic data, and, where available, the number of citations Cit on Scopus and on WOS, the Impact Factor IF and the average 5yrs IF over 5 years, relevant to the year of publication, the corresponding quartile Q and percentile p of the Impact Factor of the Journal.

1. I. Cravero, G. Puppo, M. Semplice, G. Visconti, *CWENO: uniformly accurate reconstructions for balance laws*, arXiv preprint arXiv:1607.07319, Math. of Comp., in press, online at http://www.ams.org/journals/mcom/0000-000-00/S0025-5718-2017-03273-7/, **IF 1.569, 5yrs IF 1.604, Q1 quartile, p=82** percentile.
2. E. Abbate, A. Iollo, G. Puppo, *An all-speed relaxation scheme for gases and compressible materials*, Journal of Comp. Phys., **351**, 1-24, 2017, **0 Cit on Scopus, 0 Cit. on WOS, IF 2.746, 5yrs IF 3.121, Q1 quartile, p=85** percentile.

3. G. Visconti, M. Herty, G. Puppo, A. Tosin, *Multivalued fundamental diagrams of traffic flow in the kinetic Fokker-Planck limit* arXiv:1607.08530, Multiscale Modeling and Simulation, **15**, 1267-1293, 2017, **0 Cit on Scopus, 0 Cit. on WOS, IF 1.865, 5yrs IF 2.154, Q1 quartile, p=76** percentile.

4. G. Puppo, M. Semplice, A. Tosin, G. Visconti, *Analysis of a multi-population kinetic model for traffic flow*, arXiv:1511.06395, Comm. Math. Sci, **15** , 379-412, 2017, **1 Cit on Scopus, 1 Cit on WOS, IF 1.425, 5yrs IF 1.367, Q1 quartile, p=76** percentile.

5. C. Klingenberg, M. Pirner, G. Puppo, *A consistent kinetic model for a two-component mixture with an application to plasma*, Kinetic and Related Models, **10**(2), 445-465, 2017, **2 Cit on Scopus, 1 Cit on WOS, IF 1.261, 5yrs IF 1.507, Q1 quartile, p=80** percentile.

6. G. Puppo, M. Semplice, A. Tosin, G. Visconti, *Kinetic models for traffic flow resulting in a reduced space of microscopic velocities*, arXiv:1507.08961, Kinetic and Related Models, **10**(3), 823-854, 2017, **4 Cit on Scopus, 4 Cit on WOS (highly quoted paper on WOS), IF 1.261, 5yrs IF 1.507, Q1 quartile, p=80** percentile.

7. G. Puppo, M. Semplice, *Well balanced high order schemes on non-uniform grids and entropy residuals*, J. Sci. Comp, **66**, 1052-1076, 2016, **1 Cit on Scopus, 2 Cit on WOS, IF 1.899, 5yrs IF 2.143, Q1 quartile, p=89** percentile.

8. G. Puppo, M. Semplice, A. Tosin, G. Visconti, *Fundamental diagrams in traffic flow: the case of heterogeneous kinetic models*, arXiv:1411.4988, Comm. in Math. Sci, **14**, 643-669, 2016, **4 Cit on Scopus, 5 Cit on WOS, IF 1.424, 5yrs IF 1.367, Q1 quartile, p=76** percentile.

9. F. Bernard, A. Iollo, G. Puppo, *Accurate asymptotic preserving boundary conditions for kinetic equations on Cartesian grids*, J. Sci. Comp., **65**, 735-766, 2015, **6 Cit on Scopus, 5 Cit on WOS, IF 1.946, 5yrs IF 2.074, Q1 quartile, p=92** percentile.

10. F. Bernard, A. Iollo, G. Puppo, *A local velocity grid approach for the BGK equation*, Communications in Computational Physics, **16**, 956-982, 2014, **3 Cit on Scopus, 3 Cit on WOS, IF 1.943, 5yrs IF 1.913, Q1 quartile, p=82** percentile.

11. M. Castro, C. Pares, G. Puppo, G. Russo, *Central schemes for non conservative hyperbolic systems.* SIAM J. Sci. Comp., **34**, B523-B558, 2012, **7 Cit on Scopus, 10 Cit on WOS, IF 1.949, 5yrs IF 2.233, Q1 quartile, p=95** percentile.

12. S. Pieraccini, G. Puppo, *Microscopically Implicit-Macroscopically Explicit schemes for the BGK equation*, J. Comp. Phys, **231**, 299-327, 2012, **11 Cit on Scopus, 11 Cit on WOS, IF 2.138, 5yrs IF 2.851, Q1 quartile, p=84** percentile.

13. A. Alaia, G. Puppo, *A hybrid method for hydrodynamic-kinetic flow, Part II: coupling of hydrodynamic and kinetic models*, J. Comp. Phys, **231**, 217-5242, 2012, **10 Cit on Scops, 9 Cit on WOS, IF 2.138, 5yrs IF 2.851, Q1 quartile, p=84** percentile.

14. A. Alaia, G. Puppo, *A hybrid method for hydrodynamic-kinetic flow, Part I: A particle-grid method for reducing stochastic noise in kinetic regimes*, J. Comp. Phys., **230**, 5660-5683, 2011, **3 Cit on Scopus, 3 Cit on WOS, IF 2.310, 5yrs IF 2.877, Q1 quartile, p=87** percentile.

15. G. Puppo, M. Semplice, *Numerical entropy and adaptivity for finite volume schemes*, Comm. Comp. Phys., 10, 1132-1160, 2011, **20 Cit on Scopus, 20 Cit on WOS, IF 1.397, 5yrs IF 1.704, Q2 quartile, p=65** percentile.

# 9 Administration and Organization

**2017 - present** Outreach activity with High Schools, to promote the choice of studies in Mathematics, and the Department DiSAT. In this field, I have proposed and implemented innovative proposals, such as an enquiry into the public's perception of the value of studies in Science, exploiting the opportunity given by "Alternanza Scuola-Lavoro", an educational program which prescribes that high school students must be involved in work activities.

**2015 - present** Member of SUA-RD committee: verification of quality in research and outreach, DiSAT (Department of Science and High Technology, Università dell'Insubria.

**2015 - present** Member of CPDS (Commissione Paritetica Docenti Studenti): joint committee representing professors and students for the evaluation of quality in teaching.

**2015 - present** Member of Collegio di Dottorato in Informatica e Matematica del Calcolo, Università dell'Insubria.

**2015 - present** Member of Centro di Scienze e Simbolica dei Beni Culturali, a research center stemming from Insubria, based on applications of Science to the preservation of artistic artifacts and cultural heritage.

**2013 - 2014** AiQua Committee (verification of Quality procedures), Laurea Triennale and Laurea Magistrale in Mathematics at Università dell'Insubria.

**2010 - 2014** Member of Collegio di Dottorato in Fluidodinamica, Politecnico di Torino.

**1997 - 2001** Design and planning of the web site of the Math Department of the Politecnico di Torino.

# 10 Complete publication list

In Table 1, the column Scopus and WOS contain, respectively, the citation numbers of the articles in the Scopus and WOS data bases. A dash means that the item is not (or not yet) listed in the corresponding data base. The label "submit" is for papers submitted, "in press" for papers accepted and ready for publication, "proceed." is a published proceeding for an international conference, with anonymous referees.

Table 1: **Complete Publication list**

| Authors | Title | Year | S | W | IF | 5y | Q |
|---|---|---|---|---|---|---|---|
| E. Abbate, A. Iollo, G. Puppo | *A multi-material all-speed relaxation scheme*, submitted to Journal of Comp. Phys. | submit. | | | | | |
| C. Klingenberg, M. Pirner, G. Puppo | *A consistent kinetic model for a two-component mixture of polyatomic molecules*, submitted to Comm. in Math. Sciences | submit. | | | | | |
| F. Bernard, A. Iollo, G. Puppo | *Polyatomic Model for Rarefied Flows*, submitted to J. Sci. Comp. | submit. | | | | | |
| I. Cravero, G. Puppo, M. Semplice, G. Visconti | *CWENO: uniformly accurate reconstructions for balance laws*, arXiv preprint arXiv:1607.07319, Math. of Comp., online at http://www.ams.org/journals/mcom/0000-000-00/S0025-5718-2017-03273-7/ | in press | - | - | 1.569 | 1.604 | Q1 |
| I. Cravero, G. Puppo, M. Semplice, G. Visconti | *Cool WENO schemes*, Comp. and Fluids, online at https://arxiv.org/abs/1703.00325 | in press | 0 | - | 2.313 | 2.308 | Q2 |
| E. Abbate, A. Iollo, G. Puppo | *An all-speed relaxation scheme for gases and compressible materials*, Journal of Comp. Phys., **351**, 1-24 | 2017 | 0 | 0 | 2.746 | 3.121 | Q1 |
| G. Visconti, M. Herty, G. Puppo, A. Tosin | *Multivalued fundamental diagrams of traffic flow in the kinetic Fokker-Planck limit* arXiv:1607.08530, Multiscale Modeling and Simulation, **15**, pp. 1267-1293 | 2017 | 0 | 0 | 1.865 | 2.154 | Q1 |
| G. Puppo, M. Semplice, A. Tosin, G. Visconti | *Analysis of a multi-population kinetic model for traffic flow*, arXiv:1511.06395, Comm. Math. Sci, **15** , 379-412 | 2017 | 1 | 1 | 1.425 | 1.367 | Q1 |
| C. Klingenberg, M. Pirner, G. Puppo | *A consistent kinetic model for a two-component mixture with an application to plasma*, Kinetic and Related Models, **10**(2), 445-465 | 2017 | 2 | 1 | 1.261 | 1.507 | Q1 |
| G. Puppo, M. Semplice, A. Tosin, G. Visconti | *Kinetic models for traffic flow resulting in a reduced space of microscopic velocities*, arXiv:1507.08961, Kinetic and Related Models, **10**(3), 823-854 | 2017 | 4 | 4 | 1.261 | 1.507 | Q1 |
| F. Bernard, A. Iollo, G. Puppo | *Simulation of Particle Dynamics for Rarefied Flows: Backflow in Thruster Plumes*, European Journal of Mechanics / B Fluids, **63**, 25-38 | 2017 | 0 | 0 | 1.960 | 2.098 | Q2 |

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|---|---|---|---|---|---|---|---|
| E. Abbate, A. Iollo, G. Puppo | *A relaxation scheme for the simulation of low Mach number flows*, Springer Proceedings in Math. and Stat., **200**, 227-235 | 2017 | 0 | - | proceed. | | |
| G. Puppo, M. Semplice | *Well balanced high order schemes on non-uniform grids and entropy residuals*, J. Sci. Comp, **66**, 1052-1076 | 2016 | 1 | 2 | 1.899 | 2.143 | Q1 |
| G. Puppo, M. Semplice, A. Tosin, G. Visconti | *Fundamental diagrams in traffic flow: the case of heterogeneous kinetic models*, arXiv:1411.4988, Comm. in Math. Sci, **14**, 643-669 | 2016 | 4 | 5 | 1.424 | 1.367 | Q1 |
| F. Bernard, A. Iollo, G. Puppo | *Accurate asymptotic preserving boundary conditions for kinetic equations on Cartesian grids*, J. Sci. Comp., **65**, 735-766 | 2015 | 6 | 5 | 1.946 | 2.074 | Q1 |
| F. Bernard, A. Iollo, G. Puppo | *Simulation of Diluted Flow Regimes in Presence of Unsteady Boundaries*, Finite Volumes for Complex Applications VII-Elliptic, Parabolic and Hyperbolic Problems, Springer 801 - 808 | 2014 | 1 | 0 | proceed. | | |
| A. Ferrero, F. Larocca, G. Puppo | *A robust and adaptive recovery-based discontinuous Galerkin method for the numerical solution of convection diffusion equations*, Int. J. for Num. Meth. in Fluids, **77**, 63-91 | 2015 | 6 | 2 | 1.447 | 1.457 | Q2 |
| F. Bernard, A. Iollo, G. Puppo | *A local velocity grid approach for the BGK equation*, Communications in Computational Physics, **16**, 956-982 | 2014 | 3 | 3 | 1.943 | 1.913 | Q1 |
| G. Puppo, M. Semplice | *Finite Volume schemes on 2D non-uniform grids.* 14th International Conference Hyperbolic problems: theory, numerics and applications. Volume 2, 617-624, Ser. Contemp. Appl. Math. CAM, 18, World Sci. Publishing, Singapore | 2012 | - | 0 | proceed. | | |
| M. Castro, J.T. Frings, S. Noelle, C. Parés, G. Puppo | *On the hyperbolicity of two- and three-layer shallow water equations*, Hyperbolic problems: theory, numerics and applications. Volume 1, 337-345, Ser. Contemp. Appl. Math. CAM, 17, World Sci. Publishing, Singapore | 2012 | - | - | proceed. | | |
| M. Castro, C. Pares, G. Puppo, G. Russo | *Central schemes for non conservative hyperbolic systems.* SIAM J. Sci. Comp., **34**, p. B523-B558 | 2012 | 7 | 10 | 1.949 | 2.233 | Q1 |
| S. Pieraccini, G. Puppo | *Microscopically Implicit-Macroscopically Explicit schemes for the BGK equation*, J. Comp. Phys, **231**, 299-327, | 2012 | 11 | 11 | 2.138 | 2.851 | Q1 |
| A. Alaia, G. Puppo | *A hybrid method for hydrodynamic-kinetic flow, Part II: coupling of hydrodynamic and kinetic models*, J. Comp. Phys, **231**,217-5242 | 2012 | 10 | 9 | 2.138 | 2.851 | Q1 |
| A. Alaia, G. Puppo | *A hybrid method for hydrodynamic-kinetic flow, Part I: A particle-grid method for reducing stochastic noise in kinetic regimes.* J. Comp. Phys., **230**, 5660-5683 | 2011 | 3 | 3 | 2.310 | 2.877 | Q1 |
| G. Puppo, M. Semplice | *Numerical entropy and adaptivity for finite volume schemes.* Comm. Comp. Phys., 10, 1132-1160 | 2011 | 20 | 20 | 1.397 | 1.704 | Q2 |
| G. Puppo, M. Semplice | *Adaptive grids and the entropy error indicator.* 13th International Conference Hyperbolic problems: theory, numerics and applications, | 2010 | - | - | proceed. | | |
| F. Cavalli, G. Naldi, G. Puppo, M. Semplice | *A family of relaxation schemes for nonlinear convection diffusion problems*, Commun. Comput. Phys. 5, no. 2-4, 532-545 | 2009 | 4 | 7 | 2.077 | 2.087 | Q1 |
| F. Cavalli, G. Naldi, G. Puppo, M. Semplice | *Relaxed schemes for nonlinear evolutionary PDEs.* 12th International Conference Hyperbolic problems: theory, numerics and applications, 477-485, Proc. Sympos. Appl. Math., 67, Part 2, Amer. Math. Soc., | 2009 | - | 0 | proceed. | | |

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|---|---|---|---|---|---|---|---|
| F. Cavalli, G. Naldi, G. Puppo, M. Semplice | *Relaxed schemes based on diffusive relaxation for hyperbolic-parabolic problems: some new developments.* In: Numerical methods for balance laws, G. Russo and G. Puppo eds., vol 24-2009, Quaderni di Matematica, Aracne editrice | 2009 | - | - | chapter | | |
| F. Cavalli, G. Naldi, G. Puppo, M. Semplice | *Increasing efficiency through optimal RK time integration of diffusion equations*, 11th International Conference Hyperbolic problems: theory, numerics, applications, 955-962, Springer, Berlin | 2008 | - | 0 | proceed. | | |
| F. Cavalli, G. Naldi, G. Puppo, M. Semplice | *A comparison between relaxation and Kurganov-Tadmor schemes*, Progress in industrial mathematics at ECMI 2006, 236-240, Math. Ind., 12, Springer, Berlin | 2008 | - | 0 | proceed. | | |
| G. Puppo, G. Russo | *Central Runge-Kutta schemes for stiff balance laws.* Progress in industrial mathematics at ECMI 2006, 226-230, Math. Ind., 12, Springer, Berlin | 2008 | - | 0 | proceed. | | |
| A. Alaia, S. Pieraccini, G. Puppo | *Velocity discretization for BGK equations*, 11th International Conference Hyperbolic problems: theory, numerics, applications, 857-864, Springer, Berlin | 2008 | - | 1 | proceed. | | |
| F. Cavalli, G. Naldi, G. Puppo, M. Semplice | *High order relaxation schemes for non linear diffusion problems*, SIAM J. Num. An., **45**, 2098-2119 | 2007 | 21 | 22 | 1.470 | 2.044 | Q1 |
| S. Pieraccini, G. Puppo | *Implicit-Explicit schemes for BGK kinetic equations*, J. Sci. Comput. 32, 1-28 | 2007 | 77 | 72 | 1.293 | ? | Q1 |
| S. Noelle, N. Pankratz, G. Puppo, J. Natvig | *Well balanced Finite Volume Schemes of Arbitrary Order of Accuracy for Shallow Water Flows*, J. Comp. Phys., **213**, $N^2$, 474-499 | 2006 | 144 | 146 | 2.328 | ? | Q1 |
| G. Puppo, G. Russo | *Staggered Finite Difference Schemes for Conservation Laws*, 6th ICOSAHOM, Special Issue, J. Sci. Comp., **27**, 403-418 | 2006 | 3 | 3 | 1.281 | ? | Q1 |
| G. Puppo, G. Russo | *Staggered Finite Difference Schemes for Balance Laws*, 10th International Conference on Hyperbolic Problems: Theory, Numerics, Applications, Yokohama publishers, 243-250 | 2006 | - | - | proceed. | | |
| G. Puppo | *The Entropy Regularity Indicator for Finite Volume schemes*, 10th International Conference on Hyperbolic Problems: Theory, Numerics, Applications, Yokohama publishers, 2006, 235-242 | 2006 | - | - | proceed. | | |
| D. Marobin, G. Puppo | *An Error Indicator for Semidiscrete schemes*, 3rd International Conference on Computational Fluid Dynamics, Computational Fluid Dynamics 2004 proceedings, Springer 103-108 | 2006 | - | 1 | proceed. | | |
| L. Pareschi, G. Puppo, G. Russo | *Central Runge Kutta schemes for Conservation Laws*, SIAM J. Sci. Comp., **26**, $N^o$ 3, 979-999 | 2005 | 17 | 22 | 1.509 | ? | Q1 |
| G. Puppo | *Numerical Entropy Production for Central Schemes*, SIAM J. Sci. Comp. **25**, $N^0$ 4, 1382-1415 | 2003 | 18 | 22 | 1.379 | ? | Q1 |
| G. Puppo | *Adaptive application of characteristic projection for Central Schemes*, In: T. Hou and E. Tadmor (eds) 9th International Conference Hyperbolic Problems, Theory, Numerics, Applications, Springer Verlag, 819-829 | 2003 | - | 1 | proceed. | | |
| D. Levy, G. Puppo, G. Russo | *A fourth order Central WENO Scheme for Multidimensional Hyperbolic Systems of Conservation Laws*, SIAM J. Sci. Comp. **24**, $N^0$ 2, 480-506 | 2003 | 90 | 78 | 1.291 | ? | Q1 |
| G. Puppo | *Numerical Entropy Production on Shocks and Smooth Transitions*, J. Sci. Comp. **17**, $N^0$ 1-4, 263-271. | 2002 | 10 | 7 | proceed. | | |

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|---|---|---|---|---|---|---|---|
| D. Levy, G. Puppo, G. Russo | *Compact Central WENO Schemes for Multidimensional Conservation Laws*, SIAM J. Sci. Comp., **22**, $N^0$ 2, 656-672 | 2001 | 104 | 102 | 1.421 | ? | Q1 |
| D. Levy, G. Puppo, G. Russo | *A Third order Central WENO Scheme for 2D Conservation Laws*, proceedings of 4th ICOSAHOM '98, Applied Numerical Mathematics, **33**, 407-414 | 2000 | 26 | 30 | proceed. | | |
| D. Levy, G. Puppo, G. Russo | *On the Behavior of the Total Variation in CWENO Methods for Conservation Laws*, proceedings of 4th ICOSAHOM '98, Applied Numerical Mathematics, **33**, 415-421 | 2000 | 19 | 19 | proceed. | | |
| D. Levy, G. Puppo, G. Russo | *Central WENO Schemes for Hyperbolic Systems of Conservation Laws*, Math. Model. and Num. Anal., **33**, $N^0$ 3, 547-571 | 1999 | 155 | 69 | - | - | - |
| F.Bianco, G.Puppo, G.Russo | *High order central schemes for hyperbolic systems of conservation laws*, 7th International Conference on Hyperbolic Problems: theory, Numerics, Applications, International Series of Numerical Mathematics, Vol. 129, Birkhauser Verlag, 55-64 | 1999 | - | 2 | proceed. | | |
| F. Bianco, G. Puppo, G. Russo | *High order central schemes for hyperbolic systems of conservation laws*, SIAM J. Sci Comp. Vol. 21, N. 1, 294-322 | 1999 | 66 | 62 | 1.196 | ? | Q1 |
| G. Puppo | *A vortex-grid method for Prandtl's equations*, SIAM J. Sci. Comp., Vol. 20, $N^o$ 4, 1229-1251 | 1999 | 1 | 0 | 1.196 | ? | Q1 |
| G. Puppo | *Bubble stabilization of spectral methods: the multidimensional case*, J. Sci. Comp. **13**, $N^0$ 2, 115-149 | 1998 | 0 | - | - | - | |
| C. Canuto, G. Puppo | *Bubble stabilization of spectral Legendre methods for the advection-diffusion equation*, Comp. Meth. Appl. Mech. Eng., 239-263 | 1994 | 12 | 10 | 0.727 | ? | Q1 |
| G. Puppo | *Prandtl's equations: numerical results about singularity formation and a new numerical method*, Ph.D. Thesis, CIMS, NYU | 1990 | - | - | Thesis | | |