



Jérôme BENOIT

<jerome.benoit@nyu.edu>

<jgmbenoit@rezoyer.net>



Computing and Information Technology Experience

- 2016/09–16/12 Debian specialist developer at [Logilab](#);
- 2015/04–16/03 Debian specialist developer at [IMAGINARY.org](#);
- 2012/02– Debian package contributor;
- 2008/10–09/07 small cluster installation and maintenance (Debian) at National Central University;
- 1999/09– Debian user;
- 1990/09– alongside, writes scientific code or hacks anything that compiles (or not).

Research Experience

- 2017/01– research associate at New-York University Abu Dhabi (Abu Dhabi, UAE);
- 2011/09– independent researcher;
- 2011/09–14/06 invited to Laboratory of Mathematics at Besançon (Besançon, France);
- 2009/08–11/01 research fellow at Nanyang Technological University (Singapore, Singapore);
- 2006/09–09/07 postdoctoral associate at National Central University (Jhongli, Taiwan);
- 2004/10–06/07 postdoctoral associate at University of Lisbon (Lisbon, Portugal);
- 2002/04–04/02 postdoctoral associate at National Hellenic Research Foundation (Heraklion, Greece);
- 2001/04–02/03 postdoc at University of Jena (Jena, Germany);
- 2000/01–00/09 invited to Los Alamos National Laboratory (Los Alamos, USA).

Supervision Experience

- 2010–11 informal doctoral student guidance (Singapore, Singapore): Li Na ZHAO;
- 2001–02 informal doctoral student guidance (Jena, Germany): Elizabeth VON HAUFF.

Doctoral Education

- 1995–99 *Doctorate* in Theoretical Physics at [University of Cergy-Pontoise](#) with high honors [doctoral advisor: [Rossen DANDOLOFF](#)] (Cergy-Pontoise, France);
- 1993–94 *Master (DEA — late French Advanced Studies Degree)* in [Theoretical Physics](#) with honors [Fundamental Concepts in Physics (CFP)] at [Paris-Sud](#) (Orsay, France).

Predocutorial Education

- 1991–94 *Orsay Fundamental Physics Magistère* with honors at [Paris-Sud](#) (Orsay, France);
- 1992–93 *Imperial College International Diploma* in Physics (London, United Kingdom).

Undergrad Education

- 1988–90 *Preparatory School Classes (Classe Préparatoire aux Grandes Ecoles)* — Maths Spéc P' [pure Mathematics and advanced higher Physics] — at [Lycée Carnot](#) (Dijon, France);
- 1987–88 *Preparatory School Classes* — Maths Sup prepa X=Polytechnique [pure Mathematics and higher Physics] — at [Prytanée National Militaire de La Flèche](#) (La Flèche, France).

Professional Networking

- https://www.researchgate.net/profile/Jerome_BENOIT
- <https://independent.academia.edu/JeromeBENOIT>
- <https://www.linkedin.com/in/jgmbenoit>

Community Networking

- <https://savannah.gnu.org/users/jgmb>
- <https://qa.debian.org/developer.php?login=calculus@rezoyer.net>
- <https://gitlab.com/jgmbenoit>
- <https://github.com/jgmbenoit>

Soft Skills

Troubleshooting, Problem solving,
 Self-Teaching, Critical thinking, Creative thinking,
 Mathematically minded, Analytical thinking,
 Thinking out of the box, Community-oriented,
 Team player, Cross-cultural understanding.

Hard Skills

Theoretical Physics	nonlinearity, symmetries, field theory, geometric (topological) integrable systems, information physics, geometrical frustration, small-world networks, epidemiology, nonlinear σ -model, sine-Gordon equation, power-laws, ...
Mathematics	mathematical modelling, numerical analysis, statistics, (nonlinear) analysis, differential geometry, geometrical topology, knot theory, information theory, network theory, Galois lattices, (very) special functions, quaternions, numerical experiences, ...
Computing	software development (autotools machinery, API+ABI+tests, backend+CLI+modules), object-oriented programming, scripting, symbolic computing, (human/non-human) code generation, C metaprogramming, ...
Computer	batch job processing, packaging (Debian), cluster management (Debian), building my own specific Linux kernels, hardware hacking, ...

Computing Knowledge

Simulation Tools	Surface Evolver
Software Packages	GSL, libXML2, GMP, MPFR, Arb, Maple/OpenMaple, GTS, GRTensorII, ...
Core Languages	C (<i>proficient</i>), Maple (<i>near-proficient</i>), C++, D (<i>acquiring</i>), ...
Script Languages	Maple (<i>near-proficient</i>), BASH (<i>fluent</i>), Python, Perl, DASH, D (<i>acquiring</i>), ...
Markup Languages	T _E X/L ^A T _E X, XML
Geometric Languages	METAPOST
Parallel Computation	LAM-MPI, OpenMP (<i>acquiring</i>), pthread (<i>acquiring</i>)
Programming Tools	autotools, make, flex/bison, Maple, CWEB, ...
Debugging/Profiling Tools	valgrind
Patch Tools	patch, quilt
Version Control Systems	GIT
Job Scheduling Systems	SLURM
Operating Systems	Linux (Debian GNU/Linux)
Document Typesetting	L ^A T _E X 2 _ε , T _E X, METAPOST, B _I B _T E _X , ...

Responsibilities

Referee	<i>'Journal of Physics A: Mathematical and Theoretical'</i> ;
Open Source	shared scientific software development as part of the GNU Project; package maintenance, patch submissions, and bug reports for the Debian distribution; direct patch submissions via email or pull requests via GITHUB/GITLAB to upstream maintainers for fixing bugs or sanitizing build machineries.

Language Proficiency

French	native language;
English	professional working proficiency.

Referees

Rossen DANDOLOFF (research and teaching referee; doctoral advisor)

[<rossen.dandoloﬀ@u-cergy.fr>](mailto:rossen.dandoloﬀ@u-cergy.fr)

Laboratoire de Physique Théorique et Modélisation

Université de Cergy-Pontoise, Site Saint Martin 2

2, Avenue A. Chauvin

F-95302 Cergy-Pontoise, France

Avadh SAXENA (research referee; postdoctoral advisor)

[<avadh@lanl.gov>](mailto:avadh@lanl.gov)

Theoretical Division and Center for Nonlinear Studies

Los Alamos National Laboratory

P. O. Box 1663

Los Alamos, New Mexico 87545, United States of America

Tuong TRUONG (research referee; informal doctoral mentor)

[<tuong.truong@ptm.u-cergy.fr>](mailto:tuong.truong@ptm.u-cergy.fr)

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Université de Cergy-Pontoise, Site Saint Martin 2

2, Avenue A. Chauvin

F-95302 Cergy-Pontoise, France

Saif Eddin JABARI (most recent employer; research supervisor)

[<sej7@nyu.edu>](mailto:sej7@nyu.edu)

Experimental Research Building

New York University Abu Dhabi (NYUAD)

Saadiyat Island - P. O. Box 129188

Abu Dhabi, United Arab Emirates