

# Vincent Reverdy

*Researcher in Computer Science and Astrophysics*



*Bringing together Numerical Cosmology, High-Performance Computing, and Programming Language Theory.*

## Experience

- 2022–Present **Full Researcher**, CNRS, *Laboratoire d'Annecy de Physique des Particules*, Annecy, France
- 2019–2021 **Postdoctoral Researcher**, *Mathematics Department, École Normale Supérieure*, Paris, France
- 2017–2019 **Principal Investigator**, *University of Illinois at Urbana-Champaign (UIUC)*, USA
- 2016–2019 **Co-Principal Investigator**, *University of Illinois at Urbana-Champaign (UIUC)*, USA
- 2014–2019 **Postdoctoral Research Associate**, *University of Illinois at Urbana-Champaign (UIUC)*, USA
- 2011–2014 **PhD Researcher in Numerical Cosmology**, *LUTH, Paris Observatory*, Meudon, France
- 2011–2014 **Teaching Assistant in Astrophysics**, *LUTH, Paris Observatory*, Meudon, France
- 2011 **Scientific Developer in Celestial Mechanics**, *European Space Agency*, Noordwijk, Netherlands
- 2011 **Research Assistant in Particle Physics**, *CERN*, Geneva, Switzerland
- 2011 **Research Assistant in Cosmology**, *LUTH, Paris Observatory*, Meudon, France
- 2010 **Engineering Intern in Space Instrumentation**, *CEA*, Saclay, France
- 2010 **Research Assistant in Spintronics**, *CEA*, Grenoble, France

## Additional Affiliations

- 2020–Present **Research Affiliate**, *National Center for Supercomputing Applications*, Urbana-Champaign, USA
- 2014–Present **Affiliated Researcher**, *LUTH, Paris Observatory*, Meudon, France

## Education

- 2011–2014 **Ph.D. in Astronomy and Astrophysics**, *Paris Observatory*, Meudon, France
- 2010–2011 **M.Sc. in Astronomy and Astrophysics**, *Joseph Fourier University*, Grenoble, France
- 2009–2011 **Engineering Degree, Physics and Nanosciences**, *Grenoble INP - Phelma*, Grenoble, France
- 2008–2009 **B.Sc. in Physics**, *Grenoble INP - Phelma*, Grenoble, France
- 2005–2008 **CPGE in Physics and Engineering Science**, *Lakanal/Jules Ferry*, Paris area, France
- 2005 **General Baccalaureate**, *Francois Rabelais High School*, Meudon, France

## Awards

- 2024–Present **PI, SHINE/GULI project on Units of Measurement**, *USMB/ANR*, France
- 2017–2019 **PI, STAMLA Award NSF-SI2-SSE-1642411**, *National Science Foundation*, USA
- 2016–2019 **Co-PI, DRYADS Award NSF-CCF-1647432**, *National Science Foundation*, USA
- 2014–2017 **Postdoctoral fellowship**, *National Science Foundation*, USA
- 2011–2014 **French Government PhD Scholarship**, France

## Prizes

- 2016 **1st Data Scientist**, *datascience.net*
- 2016 **Finalist, Ethics Prize**, *Challenge4Cancer, La Paillasse*
- 2015 **Audience Choice Best Talk Award**, *Society of Postdoctoral Scholars, UIUC*

- 2013 **Best Application of Big Data in HPC (DEUS Team)**, *HPCWire Awards*
- 2013 **Special Big Data Prize (DEUS Team)**, *Big Data Innovation Trophy*
- 2012 **Best use of HPC in edge HPC application (DEUS Team)**, *HPCWire Awards*
- 2012 **1st Bull – Joseph Fourier Prize in Numerical Simulation (DEUS Team)**, *Bull & GENCI*
- 2011 **Excellent Software Optimization Skills**, *Intel International Parallel Programming Contest*
- 2011 **1st National Prize in Parallel Programming**, *Intel National Parallel Programming Contest*
- 2010 **French National Robot Cup**, *Planète Sciences*

## Standardization

- 2018-present **Member of French delegation to the C++ Standards Committee**, *ISO/IEC JTC1/SC22/WG21*
- 2018-present **Member of the French Standardization Association's C++ committee**, *AFNOR*
- 2013-present **Expert for the ISO C++ Standards Committee**, *ISO/IEC JTC1/SC22/WG21*
- 2015-2016 **Member of the Floating-Point C Experts Group**, *ISO/IEC JTC1/SC22/WG14*

## Supervision

- 2025 **Supervision of 2 Master's students in computer science and cosmology**, *LAPP, France*
- 2017-2019 **Supervision of a post-doctoral researcher for the STAMLA/DRYADS projects**, *UIUC, USA*
- 2016-2019 **Supervision of 8 Research Assistants for the STAMLA/DRYADS projects**, *UIUC, USA*

## Science outreach

- 2023-Present **Involvement in 1 to 2 science outreach events per month**, *Annecy, France*
- 2011-2014 **Astrophysics conferences and visits of the Paris-Meudon Observatory**, *Meudon, France*
- 2009 **Contribution to the "Main à la pâte" outreach project in schools**, *Grenoble, France*