Nicolas Deparis | PhD student

11 rue de l'universite – 67000 Strasbourg, France

+33 (0)6 07 49 65 85 • nicolas.deparis@astro.unistra.fr
https://github.com/NicolasDeparis • DOB 24/05/1986 - 31 years old

Education

Ph.D. in Astrophysics **2014–2017**
Thesis title : Numerical study of the reionization with the simulation code EMMA *Strasbourg University*
Supervisor: Dominique Aubert

Master in Theoretical Physics **2009–2011**
Specialization : Astrophysics *Strasbourg University*

Licence "Science de la Terre de l'Univers et de l'Environnement" **2008–2009**
Specialization : Géophysics *Louis Pasteur University*

Diplôme Universitaire de Technologie "Mesures Physiques" **2005–2007**
Specialization : Techniques Instrumentales *Paul Verlaine University*

Experience

Fixed-term contract **2014**
6 months *Observatoire Astronomique de Strasbourg/CNRS*
Implementing stellar formation in a RHD cosmological code

Publications

D. Aubert, N. Deparis, and P. Ocvirk, "EMMA: an adaptive mesh refinement cosmological simulation code with radiative transfer," *Monthly Notices of the Royal Astronomical Society*, vol. 454, pp. 1012–1037, Nov. 2015.

Submitted

N. Deparis, D. Aubert, P. Ocvirk, and N. Gillet, "Radiation and supernovae feedback during the epoch of reionization with EMMA," *Monthly Notices of the Royal Astronomical Society*, Submitted.

D. Aubert, P. Ocvirk, and N. Deparis, "The reionization epoch of z=0 halos," *The Astrophysical Journal Letters*, Submitted.

In preparation

N. Deparis, D. Aubert, and P. Ocvirk, "Influence of reduced light speed approximation on reionization fronts speed in cosmological rhd simulations," *Monthly Notices of the Royal Astronomical Society*, In Prep.

Proceedings

N. Deparis, D. Aubert, and P. Ocvirk, "Stellar feedback during the reionization with EMMA," in *SF2A-2016: Proceedings of the Annual meeting of the French Society of Astronomy and Astrophysics* (C. Reylé, J. Richard, L. Cambrésy, M. Deleuil, E. Pécontal, L. Tresse, and I. Vauglin, eds.), pp. 399–402, Dec. 2016.

A. Schaaff, J. Berthier, J. Da Rocha, N. Deparis, S. Derriere, P. Gaultier, R. Houpin, J. Normand, and P. Ocvirk, "Immersive 3d Visualization of Astronomical Data," vol. 495, p. 125, Sept. 2015.

Computing skills

Languages: Python, C/C++, Fortran, Java

API: MPI,CUDA,OpenMP,HDF5,OpenGL

Tools: Git, Valgrind

Known HPC centers: PRACE TGCC Curie (Fance), PRACE CINES Occigen (France), OLCF Titan (USA)

Schools

11/2016: Parallel computing by David Brusson - Ecole Supérieure du professorat et de l'éducation, Strasbourg - France

06/2016: Gutenberg School on Astrophysics - Stars and Galaxy Formation - Observatoire de Strasbourg, France

05/2016: Galaxy formation and evolution in a cosmological context by Andrea Cattaneo - Institut d'Astrophysique de Paris, France

01/2016: From BioImage Processing to BioImage Informatics - Télécom Physique Strasbourg France

12/2015: Principle of imaging for membrane systems - Institut Charles Sadron, Cronenbourg, Strasbourg, France

03/2015: Numerical Simulations in Astrophysics - Observatoire de Strasbourg, France

Conferences

06/2016: Illuminating the Dark Ages: Quasars and Galaxies in the Reionization Epoch - MPIA Summer Conference 2016- Heidelberg, Germany

06/2016: Presentation at Journées de la SF2A - Lyon, France

04/2016: Presentation at 13th Potsdam/AIP Thinkshop "Near Field Cosmology" - Obergurgl, Tyrol, Austria

10/2015: Presentation at meeting ORAGE - Roscoff, France

05/2015: Poster at The Olympian Symposium 2015 Cosmology and the Epoch of Reionization - Paralia Katerini's, Mount Olympus, Greece

05/2015: CLUES meeting 2015 - Copenhague, Danemark

Outreach

06/2015: Kids university - Strasbourg, France

References

Dr. Dominique Aubert
Observatoire Astronomique de Strasbourg
11 rue de l'Université
67000 Strasbourg
France
+33 (0) 3 68 85 24 68
dominique.aubert@unistra.fr

Dr. Pierre Ocvirk
Observatoire Astronomique de Strasbourg
11 rue de l'Université
67000 Strasbourg
France
+33 (0) 3 68 85 24 40
pierre.ocvirk@astro.unistra.fr