



Nicolas Laporte

Curriculum Vitae

Education

- 2009 - 2013 **PhD**, *Paul Sabatier University, Toulouse (France), Astrophysics*.
PhD thesis: "Search for and study of the first galaxies ($z > 6$)" supervised by Dr. Roser Pelló at Institut de Recherche en Astrophysique et Planétologie (IRAP) in Toulouse (France). Awarded in March 2013 with honors
- 2007–2009 **Master**, *Bordeaux 1 University, Bordeaux(France), Astrophysics and corpuscular physics*.
Main courses : cosmology, galactic physics, numerical models, stellar physics and planetology. Awarded in June 2009 with honors (rank : 3/10)
- 2004–2007 **Bachelor**, *Blaise Pascal University, Clermont-Ferrand(France), Physics and Chemistry*.
Main courses : thermodynamic, fluid mechanics, quantum mechanics, statistical physics, nuclear physics, organic chemistry. Awarded in June 2007 with honors

Honors & Awards

- Nov. 2023 **Trophée des Français de l'Étranger**, awarded by the French Embassy in London for research and outreach activities.
- Oct. 2019 **Kavli Senior Fellowship**, to conduct a research project at the University of Cambridge (Cambridge - UK).
- Dec. 2013 **Pierre Maury prize from the Toulouse Academy of Science**, awarded for the best thesis in Astronomy and Space Science prepared in the Academy of Toulouse.

Research Experience

- Since Dec. 2023 **Assistant Astronomer**, *Laboratoire d'Astrophysique de Marseille, Aix-Marseille University (France)*, Main activities : study of old stellar population in the most distant galaxies, search for pop-III stars, study of large scale structure at $z \geq 6$, determine the physical properties of the main population of ionising sources in the epoch of reionisation.
- Oct. 2019 - Nov. 2023 **Senior Research Fellow**, *Kavli Institute for Cosmology, University of Cambridge (UK)*, Main activities : search for and study of old stellar population in the most distant galaxies, study of the dust properties at very high-redshift, determine the physical properties of the main population of ionising sources in the epoch of reionisation.
- March 2016 - Sept. 2019 **Post-doc**, *Astrophysics department, University College London (UK)*, Main activities : Search for, photometric and spectroscopic study of the most distant galaxies in the framework of the *Frontier Fields* project, ALMA follow-up in order to constrain their ISM properties and their role in the reionisation era. under the supervision of Prof. Richard Ellis
- March 2014 - Feb. 2016 **Post-doc**, *Instituto de Astrofísica, Pontificia Universidad Católica (CL)*, Main activities : Search for and study of the very high-redshift galaxies in the framework of the *Frontier Fields* project, study of the red-sources highlighted in *Herschel* data, study of AGN at high-redshift. under the supervision of Prof. Franz E. Bauer
- Feb. 2013 - Feb 2014 **Post-doc**, *Instituto de Astrofísica de Canarias (IAC), La Laguna (ES)*, Main activities : search for and study of very massive objects at high- z detected with instruments on board the *Herschel* Space Observatory (ESA), search for Lyman Break galaxies at $z \geq 4$ using GTC and WHT data, implication in future IR missions (SPICA and ESA L2-L3 mission) . under the supervision of Prof. Ismael Perez-Fournon

Bibliometric data

(from SAO/NASA Astrophysics Data System, ADS)

- Number of ADS "articles" : 142. First paper 2011
- Published or in press articles : 90, with 15 as first author, 14 as second author
- Number of citations: 4084
- **h-index: 33**

Teaching and Supervision Experience

- 2022-2023 **Lecturer for the "Large Scale Structure Formation" course**, *University of Cambridge*, part III students.

- Since Oct. 2021 **Supervision of a PhD student** , *Callum Witten (University of Cambridge)*, Stacking all $z \geq 8$ galaxies spectra obtained with ground-based telescopes.
- Since 2018 **Supervision of a Summer students**, *Marc Vina-Bertran (Cardiff University)*, *Nora Drewes (Leicester University)* and *Callum Donnan (St Andrews University)*, *Jules Mathieu (Clermont Auvergne University)*, *Kiana Kade (University College London)*.
- Nov. 2009 - June 2012 **Lecturer at Paul Sabatier University**, *Courses for the 1st and 2nd year students*, Courses in thermodynamic and fluid mechanics, practical exercises and laboratory in fluid mechanics and thermodynamics, 64h/year.
Person in charge: Myriam Carcasses, reference available on request

Professional service

- Since 2021 **"First light galaxies and reionisation" Science Working Group coordinator**, for the *MOSAIC/ELT consortium*.
2021 **member**, *EUCLID consortium*.
2020 **member**, *MOONS consortium*.
2016 **Reviewer**, for the *Gemini Telescope Allocation Time committee*.
- Since 2012 **Referee**, for *Nature*, *ApJ*, *MNRAS* and *A&A*.

Data reduction & Observational skills

Summary of observational skills

- Number of ESO and ALMA PI proposals : 16 (first in 2012)
- Number of co-I proposals : 38
- Number of nights at a telescope : 109 nights
- Expertise in observation, data reduction and analysis on : X-Shooter, MUSE, ALMA, NOEMA, MOSFIRE, DEIMOS, Flamings-2, WFC3, ACS, EMIR, OSIRIS, MEGARA, NIRSspec, NIRCcam, NIRISS

Press Releases

- January 2024 **EAS / University of Cambridge / Aix-Marseille University**, *Galaxy mergers solve early Universe mystery*, Related to the paper : Witten, Laporte et al. 2024, *Nature Astronomy*, in press.
- June 2021 **RAS / University of Cambridge / UCL**, *New observations of the most distant galaxies close in on cosmic dawn*, Related to the paper : Laporte et al. 2021, *MNRAS*, 505, 3336.
- May 2018 **Nature / ALMA / ESO**, *ALMA and VLT Find Evidence for Stars Forming Just 250 Million Years After Big Bang*, Related to the paper : Hashimoto, Laporte et al. 2018, *Nature*, 557, 392.
- Mar. 2017 **ESO/ALMA/HST**, *ALMA and Hubble Space Telescope views of the distant dusty galaxy A2744_YD4*, Related to the paper : Laporte et al. 2017, *ApJ*, 837, 21.
- Feb. 2014 **NASA/HST/JPL**, *Hubble and Spitzer Space Telescopes Find One of the Youngest Galaxies in the Universe*, Related to the paper : Laporte et al. 2014, *A&A*, 562L, 8L, Ref: STScI-2014-17.
- Feb. 2014 **IAC/IRAP/CRAL/EPFL/Observatoire de Genève**, *Hubble and Spitzer space telescopes "spy" one of the youngest galaxies in the Universe*, Related to the paper : Laporte et al. 2014, *A&A*, 562L, 8L.

Popularization of Science

- Since 2020 **Responsible for an ESA interactive exhibition**, *Pictures of the Earth taken by ESA astronaut Thomas Pesquet*, This exhibition will travel in France, Switzerland and Belgium.
- Since 2018 **Chair of the Astr'Auvergne Festival**, in *Auvergne*, Three days of outreach talks by professional astronomers in a Stadium with a large inflatable screen.
- Since November 2015 **President of InfiniSciences**, *Association aiming to share the knowledge in the center of France by inviting famous scientists to give public talks and to discuss with children in a school (www.infinisciences.org)*.

Languages

French	fluent	<i>native speaker</i>
English	fluent	
Spanish	advanced	
German	intermediate	