

Curriculum Vitæ

Julien Lesgourgues

Born on the 08.07.1972, Swiss and French nationalities, married, three children

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Positions and degrees

- 2015- : Permanent **full professor position** (W3) at RWTH Aachen University
(Chair of Astroparticle Physics and Cosmology)
- 2014 : **Habilitation** in Theoretical Physics, University of Savoie, France
Jury: Profs. P. Binétruy, F. Bouchet, S. Davidson, R. Durrer, P. Salati, M. Shaposhnikov
- 2008-2015 : Fixed-term **Junior Staff joint position** in the CERN Theory Division (Geneva) and
at the “Institut de Physique Théorique” (EPFL, Lausanne).
- 2000-2008: Permanent **CNRS researcher position** : Chargé de Recherche at LAPTH
(Annecy-Le-Vieux, France). Position resigned.
- 2001-2003 : **CERN Fellow** in the CERN Theory Division (CERN, Geneva).
- 1998-2000 : **Post-doctoral fellow** at SISSA (Trieste, Italie).
European Commission fellowship (“TMR network: Beyond the Standard Model”).
- 1995-1998 : **PhD cursus in the University of Tours**
PhD obtained on the 15 May 1998 with “félicitations du jury”
Title of PhD thesis : “Inflationary models and CMB anisotropies”
Supervisor : Pr. D. Polarski Referees : Prs. P. Binétruy, R. Schaeffer
Jury : Prs. B. Boisseau, N. Deruelle, R. Hakim, J.-L. Puget, A. Starobinsky
- 1994-1995 : **Master in Theoretical Physics**
(directed by E. Brézin, Ecole Normale Supérieure, Paris)
- 1991-1994 : **Ingénieur of the Ecole Polytechnique**
(Ecole Polytechnique, Palaiseau, Paris)

Scientific awards

- 2006 : “Médaille de Bronze” in Theoretical Physics offered by CNRS.
- five individual research projects funded by CNRS, three by the Swiss National Foundation.
- 2015: my PhD student B. Audren got the prize of the best Physics PhD of the year at EPFL.
- RWTH Physik Lehrpreis 2017: prize of the best physics teacher of the year at Aachen University.

Participation to observational collaborations

- 2009-2015: HFI Core Team Member of the Planck Satellite collaboration.
- 2009- : member of the Euclid Satellite collaboration (within the Theory Group).
- 2016- : member of the CORe+ satellite collaboration (project submitted to ESA).

Main scientific and administrative responsibilities

- 2010-2014 : president of Theoretical Physics department of doctoral school of “Suisse Romande”
- 2006-2010 : coordinator of the Annecy node of the EU TMR network “UniversetNet”
- supervisor of PhD students (Wessel Valkenburg, PhD obtained in July 2009, Benjamin Audren, PhD obtained in 2014, Vivian Poulin, PhD expected in 2017, Thejs Brinckmann, PhD expected in 2018, partial supervision of other students like Mario Acero, Thomas, Maria Beltran, Laurence Perotto, Alexandre Arbey, ...), Master students (about 10), Bachelor students (about 12).
- member of steering and administration committees (e.g. of the “Institut Lagrange” in Paris, formerly of the Science Faculty of the University of Savoie,...)

Teaching activities

- 2016- : every year: “The Perturbed Universe”, specialised course of the Master of Theoretical Physics, RWTH Aachen University (45 hours)
- 2015- : every year: “General Relativity and Cosmology”, module of the Master of Theoretical Physics, RWTH Aachen University (45 hours)
- 2015 : “Cosmology” module of the Master of Theoretical Physics, University of Bern (28 hours)
- 2009-2013 : every two years: “Advanced Cosmology” module of the Doctoral School of Physics, EPFL Lausanne (28+14 hours)
- 2007-2011 : every year: “Cosmology” module of the Master of Theoretical Physics, Ecole Normale Supérieure de Lyon (24 hours)
- 2009 : course on “Dark Matter and Dark Energy”, Doctoral school of Suisse Romande, EPFL
- 2006 : course on “Introduction to Inflation”, Doctoral school of Suisse Romande, EPFL
- 2002-2006 : courses of “Introduction to Cosmology” given in various occasions at the doctoral level: CERN Student Summer School in 2002, 2003, 2004, 2005, doctoral school of the University of Savoie in 2004, 2005, 2006.
- 2000-2015 : various courses for students and researchers in international summer schools; e.g: “Cosmological Perturbations” at the TASI summer school, University of Colorado, June 2012; similar courses at ICTP, CERN, Les Houches, Cargèse, etc.
- 1995-1998 : teaching assistant at the University of Tours: graduate courses in Classical and Quantum Mechanics.

Organization of scientific events

- organization of a workshop on “Cosmology after Planck: what is next?”, Les Houches, 2016 (co-Chair with François Bouchet)
- organization of a workshop on “Implications of Planck results for theoretical cosmology”, CERN, 2013 (Chair)
- organization of a workshop on “Theoretical methods for non-linear cosmology”, CERN, 2011 (co-Chair with Toni Riotto)
- organization of the “COSMO’09” conference at CERN, 2009 (co-Chair with Toni Riotto)
- organization of the “Particle Cosmology Institute” at CERN, 2009 (Chair)

- organization of the “Dark matter at small scales” workshop, APC (Paris), February 2008.
- organization of the “Astroparticle and Cosmology” workshop, Galileo Institute, Florence, from September to November 2006.
- organization of the workshops “Modern Cosmology: Inflation, CMB and Large scale Structure”, Bidasoa (Spain), August 2006 and August 2008.
- organization of the “Cosmology and Astro-Particle Physics (CAPP 2003)” conference, CERN, 2003.
- organization of the “Ekpyrotic Universe” workshop, LAPTH, Annecy, 2003.
- creation in 2001 and organization till 2007 of the “Journées des Lacs Alpains de Cosmologie” (JLAC), a one-day meeting gathering twice a year all cosmologists from Annecy, CERN, Geneva and Lausanne.
- creation in 2001 of the “Cosmo Coffee”, the CERN discussion session on Cosmology, held every week and still going on.

Public outreach

- TED talk at TEDxCERN 2014
- many conferences on cosmology for non-scientists or high-school teachers, at CERN and in France.
- few articles for science divulgation magazines (“La Recherche”, “Physics”).

Publication summary

- in October 2016, 165 papers including 148 published papers, and one monograph (*Neutrino Cosmology*, Cambridge University Press, 2013).
- in October 2016, according to the SLAC Inspire-HEP database, 24'000 citations and an h-factor of 67 (without the papers of the Planck satellite collaboration: 7'200 citations and an h-factor of 45).