

Jean-Philippe Lenain

PhD Hab.

Personal data

Date of birth	November 30, 1983	Citizenship	French
Address	8 rue René Mas, F-91350 Grigny	Family status	Civil union, 3 children
e-mail	jlenain@in2p3.fr	Web site	http://lpnhe.in2p3.fr/hess/~jlenain

Professional experience

2012

Permanent scientist (*Chargé de Recherche*), LPNHE, CNRS/IN2P3, Paris, France.
Staff researcher within the **H.E.S.S.**, and **CTA** projects and work on **Fermi/LAT**.

2018/2

Authorization to supervise research (HDR), Sorbonne Université, Paris, France.
Physics research, defended on February 19, 2018.

2011

2012

Post-doctoral position, Landessternwarte, University of Heidelberg, Heidelberg, Germany.

High energy astrophysics of active galactic nuclei, within the **CTA**, **H.E.S.S.**, and **ATOM** projects and work on **Fermi/LAT**, under the supervision of Stefan WAGNER.

2009

2011

Post-doctoral position, ISDC, University of Geneva, Geneva, Switzerland.

Extragalactic high energy astrophysics, within the **CTA** consortium and work on **Fermi/LAT**, under the supervision of Roland WALTER.

2006

2009

PhD in Astrophysics, LUTh, Observatoire de Paris-Meudon, Meudon, France, *Upper class honors, European label*.

"Gamma radiation from Active Galactic Nuclei observed at Very High Energies with H.E.S.S.: multiwavelength studies and radiative modeling", within the **H.E.S.S.** collaboration, under the supervision of Catherine BOISSON and Héléne SOL, defended on October 1, 2009.

Responsibilities and collective interest activities

Refereeing Appealed as referee for *Science*, *A&A*, *ApJ*, *MNRAS* and *Astronomy and Computing*.

01/2021

Deputy coordinator of the Extragalactic science working group of the CTA consortium.

03/2020

Elected member of the Scientific Council of the LPNHE.


09/2019


09/2021


Convener of the Simulations working group of the H.E.S.S. collaboration.


02/2019


Elected representative at the Council of Laboratory of the LPNHE.


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10/2016 Academic mentor of several PhD students at LPNHE, APC and LUTh.
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07/2016 CTA group leader at LPNHE.
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10/2014 Elected representative at the Council of Laboratory of the LPNHE.
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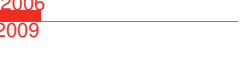
10/2014 Convener of the Extragalactic working group of the H.E.S.S. collaboration.
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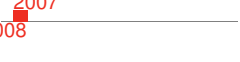
04/2013 Deputy convener of the Extragalactic working group of the H.E.S.S. collaboration.
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2013 Responsible in France for the Monte Carlo simulations of the H.E.S.S. collaboration.
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09/2013 Co-organiser of the seminars at LPNHE.
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2012 Contact person for the astroparticle community for the France Grilles GIS.
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10/2012 Co-convener of the former Active Galactic Nuclei working group of the H.E.S.S. collaboration.
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2006 Elected representative of the young researchers at the Council of Laboratory of the LUTh, Paris Observatory.
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2007 Elected representative of the graduate students at the Graduate School "Astronomy & Astrophysics" of the region Ile-de-France (ED 127).


Supervision


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11/2020 Supervision of the post-doctoral work of Floriane CANGEMI on the study of astrophysical jets with H.E.S.S., simulation of the FlashCam camera in H.E.S.S., and calibration of NectarCAM within CTA.
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12/2018 Supervision of the post-doctoral work of Sami CAROFF on Galactic sources and search for violation of Lorentz invariance with H.E.S.S., and calibration of NectarCAM within CTA.
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10/2017 Supervision of Gabriel EMERY's PhD thesis on the temporal properties of active galactic nuclei at very high energies with H.E.S.S.
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11/2015 Supervision of the post-doctoral work of Matteo CERRUTI on extragalactic transient sources with H.E.S.S.
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10/2014 Co-supervision (50%) of Daniel KERSZBERG's PhD thesis, with Pascal VINCENT, on the study of electrons and positrons galactic diffuse emission and study of the performances of the second phase of the H.E.S.S. experiment.
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2013 Supervision of several B.Sc. (3) and M.Sc. (7) internships.

PhD thesis committees

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June 2017 Jill CHEVALIER, "Active Galactic Nuclei population study at TeV with the H.E.S.S. telescopes and variability studies of the blazar PKS 2155–304 with SSC modelling" under the supervision of Giovanni LAMANNA and David SANCHEZ, *LAPP, Annecy, France*.
Examiner
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Oct. 2017 Floriana ZEFI, "Gamma-ray flux variation studies from the blazar B2 1215+30 with the Fermi-LAT and the Crab Nebula with the H.E.S.S. experiment" under the supervision of Mathieu DE NAUROIS and Stephen FEGAN, *LLR, Paris, France*.
Examiner

Feb. 2020

Janeth VALVERDE, "New insights on the nature of blazars from a decade of multi-wavelength observations: Discovery of a very large shift of the synchrotron peak frequency, long-term optical-gamma-ray flux correlations, and rising flux trend in the BL Lac 1ES 1215+303" under the supervision of Deirdre HORAN and Denis BERNARD, *LLR, Paris, France*.

Referee

Prizes and distinctions

10/2018

H.E.S.S. prize.

Prize honoring the outstanding service contributions of a young scientist to the experiment.

Languages

French	Mother tongue	
English	Written, read and spoken fluently	TOEIC passed in 2005 (score: 835/990)
Spanish	Good knowledge and practice	
German	Good knowledge and practice	

Computer skills

Operating systems	GNU/Linux (Ubuntu, Debian, Redhat, Fedora, ...), Unix (Sun Solaris), Mac OS, Windows.
Languages	C, C++, Python, ROOT, Shell (BASH, CSH), Fortran, (X)HTML, PHP, MySQL, IDL/GDL, basic MPI/OpenMP and NVIDIA-CUDA.
Skills	Numerical computing on national facilities (CC-IN2P3) and grids (EGEE-III, EGI), system administration (Linux, MySQL, apache, ...).

Teaching and internships

2015

Lecturer at the STEP'UP (Earth, Environment, and Universe Physics Sciences) graduate school (ED 560), Paris, France.

High energy astrophysics (10 h/year).

2006
2009

Physics lecturer, *University Pierre and Marie Curie*, Paris, France.

Practical and lab works.

June
August 2008

Marie Curie Early Stage Training fellow, *Astronomy group, Department of Physics, University of Durham*, Durham, U.K.

3 months on the study of the multi-wavelength radiation of jets in blazars, in collaboration with Martin J. WARD and Paula M. CHADWICK.

April
June 2006

Trainee for the 2nd year of M.Sc., *LUTH, Observatoire de Paris-Meudon*, Meudon, France.

3-month training period on the study of γ -rays in Active Galactic Nuclei within the framework of the H.E.S.S. project, under the supervision of Catherine BOISSON and H el ene SOL.

March 2006

Observational expedition, Savalou, Benin.

Total solar eclipse on March 29, organized by the Master of Astrophysics, Observatoire de Paris-Meudon: observations and talks in high schools.

May
July 2005

Trainee for the 1st year of M.Sc., *High Energy Astrophysics Division, Harvard-Smithsonian Center for Astrophysics (CfA)*, Cambridge, MA, USA.

13-week training period on the study of the gas-radio plasma interaction in the galaxy NGC 4261 observed in X-ray with the *Chandra* space telescope, under the supervision of William R. FORMAN, Ralph KRAFT and Christine JONES.

June
July 2004

Trainee for the 3rd year of B.Sc., IAS (*Institut d'Astrophysique Spatiale*), University of Paris XI, Orsay, France.

6-week training period on spectro-imaging of Uranus and its rings, under the supervision of François POULET.

Education

2004
2006

Master of Science, University of Paris XI and Observatory of Paris, Paris, France, *Upper second class honors*.

- Master 2 in Astronomy & Astrophysics, Astrophysics course.
- Master 1 in Fundamental Physics.

2003
2006

Magistère de Physique, University of Paris XI, Orsay, France, *Upper second class honors*.
Fundamental physics.

A “magistère” is a three-year program in which the student is required to maintain a B average at least.

2003
2004

Bachelor of Science, University of Paris XI, Orsay, France, *Lower second class honors*.
Fundamental physics, Specialization in astrophysics.

2001
2003

Preparatory classes for engineering schools, Kléber secondary school, Strasbourg, France.

Physics-Chemistry.

2001

Scientific “Baccalauréat”, Gymnase Jean Sturm secondary school, Strasbourg, France, A-.

French equivalent of A-Levels.