



# VALERIA PETTORINO

PHYSICIST, PHD, HDR

## CONTACT INFORMATION

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## PROFILE

I am an astrophysicist with 15+ years experience. Project manager within large international collaborations, typically in roles at the interface between theory and data analysis. President of the Programme National de Cosmologie et Galaxies.

## SKILLS & ABILITIES

- Science and data science
- Project management
- Event organisation
- Communication
- Speaker
- Enjoys working in a Team

## QUALIFICATIONS

2019 Habilitation à Diriger des recherches  
2017 - 2026 Abilitazione Scientifica Nazionale  
02/A2 - FISICA TEORICA DELLE INTERAZIONI  
FONDAMENTALI (Prima e Seconda Fascia)  
02/C1 - ASTRONOMIA, ASTROFISICA, FISICA  
DELLA TERRA E DEI PIANETI (Prima e  
Seconda Fascia)

## PROFESSIONAL HISTORY

### Staff Scientist

CEA Paris Saclay (2016 - Present)

Management responsibilities:

- President of the Programme National de Cosmologie et galaxies (2019 - present)
- Co-Lead of Euclid Satellite Inter-Science Taskforce
- Euclid Builder status conferred for key, long-term contributions

Communication and mentoring:

- Direction board for Euclid France Communication
- Advisor for Euclid - ENSAAMA science and art partnership
- Co-lead of Mentorship Programme for Women in Physics

Events:

- Organiser of GOLD 2020, 10-week scientific programme
- Board member of EuroPython Society (2018-2019)
- Co-organiser of EuroPython conferences (2017-2019)
- Co-organiser of EuroSciPy conference (2020)

Acquired experience in Agile Management, Deep Learning

### Science to Data Science Fellow

Virtual training (2016)

- Machine learning for healthcare, IOT project, London start-up.

### Group Leader

University of Heidelberg (2014 - 2016)

Responsibilities:

- Lead of Planck satellite data analysis on dark energy
- Grant manager, ~ 1M euro won in 1.5 years
- Representative for European CANTATA COST action
- Member of Research Council for investments plan

Acquired experience in management

### Postdoctoral Researcher

University of Geneva (2012 - 2014)

SISSA Trieste (2010 - 2012)

Columbia University, New York (2009-2010)

University of Heidelberg (2007-2009)

University of Torino (2005-2007)

Events:

- Organizer and funder of schools and conferences

Communication:

- Euclid Deputy for Public Outreach (2012-2014)
- Popular talk at the Italian Academy in New York

Grants I won:

- Marie Curie, Alexander von Humboldt Fellowships, SISSA Young scientists, Research Associate at the Italian Academy in New York

Acquired experience in data analysis and communication to different audiences

## LANGUAGES

**Italian**  
Native



**English**  
Full Professional



**French**  
Full Professional



**German**  
Intermediate



## AWARDS

- 2019 Euclid STAR Prize, category TEAM
- 2019 Giuseppe and Vanna Cocconi Prize to WMAP and Planck Collaborations
- 2018 Gruber Prize in Cosmology to Planck Collaboration
- 2018 Marcel Grossman Institutional Award to Planck collaboration
- 2018 Group Award by Royal Society to Planck Collaboration
- 2010, 2014, Best Reviewer for PLB
- 1995, 3rd place English debating competition in Ontario, Canada
- 1993 Langhe Prize

## MEDIA

Interview for Quanta Magazine:  
<https://www.quantamagazine.org/cosmologist-valeria-pettorino-wanders-in-dantes-dark-wood-20181113/>

Press Releases and videos available at:  
<https://www.valeriapettorino.com/communication>

## INVITED TALKS



## EDUCATIONAL HISTORY

### Habilitation à Diriger des Recherches (HDR)

Université Paris Sud, 2019

### PhD in fundamental and applied physics

Federico II Univ. Naples 2012 - 2015

### Graduate and undergraduate studies

Federico II Univ. Naples 1997 - 2012  
Liceo Scientifico Caro Naples 1992 - 1997

- ERASMUS exchange in Grenoble
- Intercultura exchange in Canada
- Langhe Prize for highest marks in the school
- 60/60 with mention of committee

## CERTIFIED TRAINING

- Intermediate Machine Learning on Kaggle (2020)
- Convolutional Neural Networks in TensorFlow (2020)
- Introduction to TensorFlow for AI, ML, and DL (2020)
- Managing an Agile Team (2020)
- Data Visualization with Python by IBM (2019)
- Machine Learning by Andrew NG on Coursera (2019)
- Using Databases with Python (2015)
- A Crash Course in Data Science (2015)
- Communication in the 21st Century Workplace (2015)
- Python Data Structures (2015)
- The Art of Negotiation (2015)

## INTERESTS AND HOBBIES

I am curious about learning new skills and topics. Having moved several times I learned to embrace what each city had to offer. Over the years I have done:

- acting classes
- creative writing
- editing and evaluation in writing competitions
- co-organisation of performances in bookshops (2004 - 2007)
- collaborative-writing of novels
- debating
- tango, swing, valse