

Guillaume Castex

Curriculum Vitæ

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Personal Information

Name **Guillaume Castex**

Date and Place of Birth **01/10/1985, Jonzac, France.**

Nationality **French**

Job experience

June 2013 **Postdoctoral research associate**
Oct 2015 *Scuola Internazionale Superiore di Studi Avanzati, Trieste, Italy.*

- Realisation of sky simulations for the Planck and EBEX collaborations.
- In charge of the development of CIB sky emission simulation modelling.
- Implementation of model optimisation using Monte-Carlo Markov Chain techniques.

Oct 2009 **Ph. D.**
Jan 2013 *AstroParticule et Cosmologie laboratory, Paris, France.*
Supervisor: J. Delabrouille
Title: *Simulation and modelisation of the sky in the millimetric domain*

- Member of the Planck Sky Model (PSM) developing team.
- Use of the PSM to make simulations for the Planck collaboration.
- Development of the 3D Far Infrared Model used in the software.
- Realisation and validation of Full Focal Plane simulations (Planck reference simulations).

May - Aug 2009 **Internship**
Commissariat à l'Énergie Atomique, Saclay, France.

- Study of star formation tracers in infra-red galaxies.

May 2006 **Internship**
Centre d'Études Nucléaires de Bordeaux-Gradignan, Gradignan, France.

- Pulsar data analysis for the GLAST satellite.

Languages

French **Native**

English **Fluent**

Italian **Beginner**

Education

- 2013 **PhD in Astrophysics**
University Paris Diderot, AstroParticule et Cosmologie laboratory, Paris, France.
- 2009 **Master in Physics,**
University Paris Diderot, France.
- 2006 **Bachelor in Physics**
University Bordeaux I, France.

Informatic tools

- Advanced IDL, Octave, bash, Python.
- Basic C, PHP, HTML, mySQL.
- Machine learning algorithms Monte-Carlo Markov chains, neural networks, K-means.

Teaching and outreach

- Aug 5-11, 2013 **Lecturer**, *Petnica School of Cosmology, Petnica, Serbia.*
Lectures on CMB physics and observation experiments.
- Dec 2009 **Lecturer**, *Palais de la Découverte museum, Paris, France.*
- May 2013 Presentation of general astronomy lectures to the museum visitors. Lectures included Big Bang theory, Solar system physics and various astronomy related topics.
- Nov 2010 **Tutor**, *Science Ouverte association, Paris, France.*
- June 2011 Tutoring in mathematics and physics for high school students.
- Nov 20, 2010 **Stand host**, *Fete le savoir, Paris, France.*
Lecture to primary school students on astronomy, light, and energy during an outreach astronomy event.
- Aug 7-13, 2010 **Stand host**, *Festival d'astronomie de Fleurance, Fleurance, France.*
Presentation of neutrino physics and ANTARES experiment.

Skills

- Extensive experience in working in multi-developers projects.
- Thrive in working as part of a team, but also capable of working independantly.
- Creative thinking and problem solving skills developed through 6 years of research experience.
- Good communication skills obtained from teaching experience.

Hobbies

Reading, cinema, sport (ski, bicycle).