

## PELTON Julien

Date of Birth : 3rd November 1988

Country of Citizenship : France

Laboratoire AstroParticule et Cosmologie, Université Paris Diderot

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## Curriculum Vitae

### Education

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2012-(2015)	<b>Graduate student in Cosmology with Dr. Radek Stompor</b> - <i>Laboratoire AstroParticule et Cosmologie (APC) at the University Paris 7 - Denis Diderot, Paris</i> Data analysis and Scientific Exploitation of data sets of the CMB B-mode experiment, POLARBEAR.
2011-2012	<b>Master 2 Nuclear, Particle, Astroparticle and Cosmology (NPAC)</b> - <i>Université Paris-Sud XI, Orsay, France</i> Year of specialization : <b>Cosmology</b> . Obtained with distinctions.
2010-2011	<b>Master 1</b> - <i>Imperial College University, London, UK</i> Physics, ERASMUS exchange.
2009-2012	<b>Licence, Master and Magistère in Fundamental Physics</b> - <i>Université Paris-Sud XI, Orsay</i> <i>Equivalent to Bsc and Msc + 1.</i> Obtained with distinctions.
2006-2009	<b>Preparatory classes for competitive examinations (CPGE) in Physics</b> - <i>Marcelin Berthelot, Saint-Maur-des-Fossés (France)</i> PCSI/PSI

### Research history

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2012-Present	<b>Data analysis and Scientific Exploitation of data sets of the CMB B-mode experiment, POLARBEAR.</b> - <i>APC, Université Paris 7</i> Regular visits to University of California, Berkeley (Berkeley Cosmology group and LBNL). Advisor : Dr. R. Stompor
2010-2011	<b>BPS Brane in Supergravity</b> - <i>Physics Department, The Blackett Laboratory, Imperial College, London, UK</i> Advisor : Prof. K. Stelle
2010 (2 months)	<b>Non-gaussianities in the CMB</b> - <i>Laboratoire de Physique Théorique d'Orsay, Université Paris XI</i> Advisor : Prof. Bartjan van Tent

### Teaching

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2012-2015	Teaching assistant at Université Paris Diderot : 2012-2015 : <b>Physics for 1st year at Medical School</b> 2013 : <b>Differential equation for 2nd year in Biology</b> 2012 : <b>Office automation and basics in computer science for 1st year in Physics</b>
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## Refereed Journal Articles

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| 2014 | Polarbear Collaboration : <b>A Measurement of the Cosmic Microwave Background B-Mode Polarization Power Spectrum at Sub-Degree Scales with POLARBEAR</b> - <i>ApJ</i> , <b>794</b> , 171                                     |
| 2014 | Polarbear Collaboration : <b>Measurement of the Cosmic Microwave Background Polarization Lensing Power Spectrum with the POLARBEAR experiment</b> - <i>Phys. Rev. Lett.</i> <b>113</b> , 021301                              |
| 2014 | Polarbear Collaboration : <b>Evidence for Gravitational Lensing of the Cosmic Microwave Background Polarization from Cross-correlation with the Cosmic Infrared Background</b> - <i>Phys. Rev. Lett.</i> <b>112</b> , 131302 |

## Conference Proceedings

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| 2104 | Peloton, J. et al. : <b>POLARBEAR experiment : Data analysis of the first season</b> - <i>The proceedings of the 49<sup>th</sup> Rencontres de Moriond</i>   |
| 2014 | Fabbian, G. et al. : <b>The POLARBEAR experiment : first season results and beyond</b> - <i>The proceedings of the 49<sup>th</sup> Rencontres de Moriond</i>   |
| 2014 | Barron, D. et al. : <b>The POLARBEAR cosmic microwave background polarization experiment</b> - <i>J. Low Temperature Physics</i> , 2014  |
| 2014 | Nishino, H. et al : <b>POLARBEAR CMB Polarization Experiment</b> - <i>JPS Conf. Proc.</i> <b>1</b> , 013107 (2014)   |
| 2014 | Arnold, K. et al : <b>The SIMONS ARRAY : expanding POLARBEAR to three multi-chroic telescopes</b> - <i>Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series</i> , <b>9153</b> |
| 2014 | Inoue, Y. et al. : <b>Thermal and optical characterization for POLARBEAR-2 optical system</b> - <i>Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series</i> , <b>9153</b>     |
| 2014 | Barron, D. et al. : <b>Development and characterization of the readout system for POLARBEAR-2</b> - <i>Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series</i> , <b>9153</b> |

## In preparation

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| 2014 | A. Ferte, J. Peloton, J. Grain and R. Stompor : <b>Detecting the tensor-to-scalar ratio with the pure pseudospectrum reconstruction of B-mode</b> - <i>in prep.</i> |
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## Talks

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| August 2014 | <b>Collaboration meeting</b> - <i>San Diego, CA, USA</i><br>Map-making and power spectrum estimation   |
| May 2014    | <b>Cosmology seminar, IAS</b> - <i>Orsay, France</i><br>POLARBEAR experiment : Results from the first observational campaign and characterization of systematic instrumental effect. |
| May 2014    | <b>Astronomical Polarimetry (ASTROPOL) 2014</b> - <i>Grenoble, France</i><br>Contributed talk : POLARBEAR experiment : data analysis and results of the first season                 |
| March 2014  | <b>Rencontres de Moriond, Cosmology 2014</b> - <i>La Thuile, Italy</i><br>Poster : POLARBEAR experiment : Data analysis of the first season  |
| July 2013   | <b>ICTP : New light in cosmology from the CMB</b> - <i>Trieste, Italy</i><br>Contributed talk : Exploring CMB polarization with POLARBEAR  |
| June 2013   | <b>LPTHE</b> - <i>Université Paris 6 - Jussieu, France</i><br>Exploring CMB polarization with POLARBEAR  |

## Awards and Honors

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2012	PhD Fellowship from the French Ministry of Education and Research and awarded by the Graduate school Particles, Nuclei and Cosmology (PNC) and by the University Paris 7 - Denis Diderot.
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## Administrative responsibility

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2013-2015	Elected as the representative of the graduate students to the laboratory council.
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