

CURRICULUM VITAE

Anna Cabré Albós

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Date of Birth: 23rd December 1980

Nationality: Spanish

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PROFESSIONAL SITUATION

Professional category: post-doc under the supervision of Bhuvnesh Jain in University of Pennsylvania, department of Astronomy and Astrophysics, from 1st October 2009

Organization: University of Pennsylvania

Department: Physics and Astronomy

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RESEARCH

Research in cosmology:

Large scale structure and cosmic microwave background.

Correlation function, Integrated Sachs-Wolfe effect, dark energy, dark matter, baryon acoustic peak, lensing, redshift space distortions, Luminous Red Galaxies, cosmic microwave background, cosmological parameters.

Weak lensing and dynamics of galaxies and clusters.

Publications

- *Cross-correlation of WMAP3 and SDSS DR4: new evidence for dark energy*, Cabré et al., 2006, MNRAS, 372, 23
- *Evidence for dark energy: cross-correlating SDSS5 and WMAP3*, Cabré et al., 2007, ASPC, 379, 283
- *Error analysis in cross-correlation of sky maps: application to the ISW detection*, Cabré et al., 2007, MNRAS, 381, 1347
- *Clustering of luminous red galaxies I: large scale redshift space distortions*, Cabré & Gaztañaga, 2009, MNRAS, 393, 1183
- *Clustering of luminous red galaxies II: small scale redshift space distortions*, Cabré & Gaztañaga, 2009, MNRAS, 396, 1119
- *Clustering of Luminous Red Galaxies III: Detection of the Baryon Acoustic Peak in the 3-point Correlation Function*, Gaztañaga et al, 2009, MNRAS, 399, 801
- *Clustering of Luminous Red Galaxies IV: Baryon Acoustic Peak in the Line-of-Sight Direction and a Direct Measurement of $H(z)$* , Gaztañaga, Cabré & Hui, 2009, MNRAS, 399, 1663

- *Cosmological parameter constraints from SDSS luminous red galaxies: a new treatment of large-scale clustering*, Sánchez, Crocce, Cabré, Baugh and Gaztañaga, 2009, MNRAS, 400, 1643
- *Modeling the angular correlation function and its full covariance in Photometric Galaxy Surveys*, Crocce, Cabré and Gaztañaga, astro-ph/1004.4640
- *Tracing The Sound Horizon Scale With Photometric Redshift Surveys*, Sánchez et al, astro-ph/1006.3226

ACADEMIC FORMATION

- Physics Degree, Universitat de Barcelona (UB), july 2003
- DEA, Universitat de Barcelona (UB), september 2005 (Equivalent to Master's Degree in Astrophysics)
- Ph.D in Physics. Title: Large scale structure and dark energy (supervisor Enrique Gaztañaga), Universitat de Barcelona (UB), June 2008
- Post-doc (supervisor Enrique Gaztañaga), Institut d'Estudis Espacials, Barcelona, 2008-2009

GRANTS AND HONOURS

- Ph.D thesis grant, 2004-2007, FI, Generalitat de Catalunya
- Travel grant to Durham (Institute for Computational Cosmology), 3 months 2005, Generalitat de Catalunya
- Travel grant to Puebla, Mexico (INAOE), 1 month 2006, LENAC
- Travel grant to Chicago (University of Chicago), 3 months 2006, Generalitat de Catalunya

VISITS TO OTHER INSTITUTIONS

- Institute for Computational Cosmology (ICC), Durham, Great Britain, February-May 2005 (supervisor: Carlton Baugh)
- Instituto Nacional de Astrofísica, Óptica y Electrónica (INAOE), Puebla, Mexico, February 2006 (supervisor: Enrique Gaztañaga)
- University of Chicago and Fermilab, Chicago, USA, March-June 2006 (supervisor: Joshua Frieman)

SKILLS AND ABILITIES

Languages

- Spanish: Native
- Catalan: Native
- English: Advanced Level

- French: Basic Level

Computing experience

- Word Processors: Microsoft Office (Word, Excel, PowerPoint, Access), LaTeX
- Operating Systems: Microsoft Windows 3.11/95/98/2000/XP, LINUX (Debian, Red Hat, Fedora, Mandrake and Suse), UNIX
- Programming languages: Fortran, IDL, UNIX, SuperMongo, HTML
- Astronomical software: HEALPIX, sql, HYPERZ

ATTENDED SCHOOLS AND MEETINGS

- 10 years of Cosmic shear, Edinburgh, 2010
- Great Lakes conference, Chicago, 2010
- Collaboration meeting DES, Madrid, 2010
- Collaboration meeting DES, SLAC, 2009
- Collaboration meeting DES, Rio de Janeiro, 2009
- Collaboration meeting DES, Chicago, 2006
- "VII Reunión Científica de la SEA", Barcelona, 2006
- Cosmic Frontiers, Durham, 2006
- Cross-correlations between large scale structure and WMAP, Chicago, 2006
- Internation summer school "Data Analysis in Cosmology", Valencia, 2004
- 20th Colloquium on CMB physics and observation, Paris, 2004