

Personal

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Skills

| | |
|----------------------|-----------|
| Python | ● ● ● ● ● |
| Mathematica | ● ● ● ● ● |
| GitHub | ● ● ● ● ● |
| Machine Learning | ● ● ● ● ● |
| C++/C | ● ● ● ● ● |
| Communication skills | ● ● ● ● ● |
| Team worker | ● ● ● ● ● |

Languages

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|---------|-----------|
| Spanish | ● ● ● ● ● |
| English | ● ● ● ● ● |
| French | ● ● ● ● ● |
| German | ● ● ● ● ● |

Interests

- Gospel singing
- Hiking
- Travelling

Work experience

- Postdoctoral Research Associate** Sep 2019 - Apr 2021
University of Manchester, Manchester
Weak Lensing Cosmology,
SkyPy project co-founder,
member of Dark Energy Survey.
- Private Tutor** Nov 2018 - Aug 2019
Academy Eureka, Montilla
Learning support for Secondary level and A-levels students.
- Associate Tutor** Sep 2014 - Jul 2017
University of Sussex, Brighton
Workshops and learning support for Undergraduate and Masters students.

Education and Qualifications

- PhD in Theoretical Cosmology** Sep 2014 - Oct 2018
University of Sussex, Brighton
Effective Field Theory, Non-linear power spectrum, large-scale structure.
Higher order perturbation theory techniques for the matter power spectrum in real and redshift space, and the halo power spectrum.
- Masters Degree in Education** Sep 2016 - Jul 2019
Distance Learning University of Madrid, Madrid
Masters in Teaching Secondary School, Physics and Chemistry.
- Masters Degree in Cosmology** Sep 2013 - Jul 2014
University of Aix-Marseille, Marseille
- Bachelor Degree in Theoretical Physics** Sep 2008 - Jul 2013
Complutense University of Madrid, Madrid

Awards and Recognitions

- 2019** "Sussex Astronomy Centre Thesis Prize" for high-quality thesis and excellent defence.
2008 Second Place in the "Physics Olympics", local phase, 2008.

Courses

- Associate Tutor** Sep 2014 - Jul 2015
The Higher Education Academy
"Associate Tutor" training course and certificate, The Higher Education Academy, United Kingdom.
- Introduction to Machine Learning** Jan 2020 - May 2020
Udacity
Introduction to machine learning, supervised and unsupervised algorithms, SVM, feature selection and validation.

Publications

- de la Bella, L. F. and Tessore, N. and Bridle, S. (2020), The unequal-time matter power spectrum: impact on weak lensing observables, arXiv 2011.06185.
 - de la Bella, L. F., Regan, D., Seery, D. and Parkinson, D. (2018), Impact of bias and redshift-space modelling for the halo power spectrum: Testing the effective field theory of large-scale structure, DOI: 10.1088/1475-7516/2020/07/011.
 - de la Bella, L. F., Regan, D., Seery, D. and Hotchkiss, S. (2017), The matter power spectrum in redshift space using effective field theory, DOI: 10.1088/1475-7516/2017/11/039.
 - Cortez, J., de la Bella, L. F., Martin-de Blas, D. and Mena Marugan, G. (2012), Uniqueness of the Fock quantization of scalar fields under node preserving canonical transformations varying in time, DOI: 10.1103/physrevd.87.044013.
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Papers in preparation

- Tessore N. and de la Bella L. (in prep. 2020), Cosmic lensing two-point functions with exact projections.
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Software

- L. F. de la Bella, unequalpy, Nov., 2020. 10.5281/zenodo.4268314.
 - N. Tessore and L. F. de la Bella, corfu, Nov., 2020. 10.5281/zenodo.4268486.
 - S. Collaboration, Skypy, Apr., 2020. 10.5281/zenodo.4071945.
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Relevant talks

The extensive list of seminars can be found on my personal webpage.

- September - December 2020, 'SkyPy' and 'Limber's Journey', series of colloquia across the UK.
- March 2020, 'Effective Field Theory of Large Scale Structure', internal seminar, University of Manchester.
- December 2019, 'Kinetic Field Theory overview', workshop, University of Manchester.
- June 2019, 'Introduction to Python', job interview, University of Nottingham.
- April 2017, 'The matter power spectrum in redshift space using effective field theory', seminar, University of Granada,
- April 2016, 'Effective Field Theory of Large Scale Structure in Redshift Space', seminar, University of Aix-Marseille.
- March 2016, 'EFToLSS and Redshift Space Distortions', conference talk. IberiCOS 2016.
- January 2016, 'EFToLSS and Redshift Space Distortions', EFT workshop, University of Kent.
- April 2015, 'Unifying Dark Energy Theories', conference talk. IberiCOS 2015.
- June 2014, 'Structure formation constraints in Dark Energy an Modified Gravity theories within the Effective Field Theory', master thesis, University of Aix-Marseille.
- July 2012, 'Uniqueness of the Fock Quantization of Scalar Fields', graduate thesis, Complutense University of Madrid.
- March 2012, 'The Poincare Conjecture', conference talk, Jerte Advanced Relativity Meeting, Navaconcejo.