


Pol Massana Zapata

Astrophysics Research Group, Department of Physics

University of Surrey • Guildford, GU2 7XH

+44 7380603336 — p.massana@surrey.ac.uk — <https://pmassana.github.io/>

 orcid.org/0000-0002-8093-7471

Education

- 2021 **Ph.D. in Astronomy** (expected)
University of Surrey, Guildford, UK
Thesis: The SMC as a probe for galaxy evolution
Supervisor: Noelia E. D. Noël
- 2017 **Masters in Astrophysics and Cosmology**
Universitat de Barcelona, Barcelona, Catalonia
Thesis: Scientific Validation of Clusterix 2.0
Supervisor: Carme Jordi
- 2016 **Degree in Physics (BS equivalent)**
Universitat de Barcelona, Barcelona, Catalonia

Research Appointments

- 2020– Support Astronomer at Isaac Newton Group of Telescopes, La Palma, Spain.
- 2017– Post-Graduate Researcher, University of Surrey
- 2015-2017 Undergraduate Research Associate, Universitat de Barcelona

Teaching and Advising

- 2020 Advising Kasia Nowak (Masters Physics student) on *LMC structure through young main sequence stars* as part of a Summer placement
- 2019 Advising Alex Goater (Masters Physics student) on *SMC line-of-sight studies* as part of a Summer placement
- 2018–2020 Teaching Assistant for “Scientific Investigation Skills”, “Introduction to Astronomy”, and “Physics First year Undergraduate Laboratories” modules, University of Surrey

Publications

8 total, 1 first author and 7 with contributed observations

- 2020 C. P. M. Bell, M-R. L. Cioni, A. H. Wright, and 23 more coauthors, including **P. Massana**, *The intrinsic reddening of the Magellanic Clouds as traced by background galaxies - II. The Small Magellanic Cloud*, Monthly Notices of the Royal Astronomical Society, 499, 993.

W. Cerny, A. B. Pace, A. Drlica-Wagner, and 29 more coauthors, including **P. Massana**, *Discovery of an Ultra-Faint Stellar System near the Magellanic Clouds with the DECam Local Volume Exploration (DELVE) Survey*, eprint arXiv:2009.08550, submitted to AAS journals.

P. Massana, N.E.D. Noël, D.L. Nidever, and SMASH Collaboration, *SMASHing the low surface brightness SMC*, 2020, Monthly Notices of the Royal Astronomical Society, 498, 1034.

T. Ruiz-Lara, C. Gallart, M. Monelli, and more 23 coauthors, including **P. Massana**, *The Large Magellanic Cloud stellar content with SMASH. I. Assessing the stability of the Magellanic spiral arms*, *Astronomy & Astrophysics*, 639, L3.

S. Mau, W. Cerny, A. B. Pace, and 56 more coauthors, including **P. Massana**, *Two Ultra-faint Milky Way Stellar Systems Discovered in Early Data from the DECam Local Volume Exploration Survey*, *The Astrophysical Journal*, 890, 136.

2019 D.L. Nidever, K. Olsen, Y. Choi, and more 23 coauthors, including **P. Massana**, *Exploring the Very Extended Low-surface-brightness Stellar Populations of the Large Magellanic Cloud with SMASH*, 2019, *The Astrophysical Journal*, 874, 118.

2018 Y. Choi, D.L. Nidever, K. Olsen, and more 18 coauthors, including **P. Massana**, *SMASHing the LMC: Mapping a Ring-like Stellar Overdensity in the LMC Disk*, 2018, *The Astrophysical Journal*, 869, 125.

Y. Choi, D.L. Nidever, K. Olsen, and more 18 coauthors, including **P. Massana**, *SMASHing the LMC: A Tidally Induced Warp in the Outer LMC and a Large-scale Reddening Map*, 2018, *The Astrophysical Journal*, 866, 90.

Presentations (as first author only)

2020 *Star Formation History of the SMC through SMASH*, contributed talk, Space Telescope Science Institute Spring Symposium, The Local Group: Assembly and Evolution, Baltimore, US (virtual). Given 02/09/20.

Star Formation History of the SMC through SMASH, contributed talk, European Astronomical Society Annual meeting, Leiden, Netherlands (virtual). Given 01/07/20.

SMASHing the Small Magellanic Cloud (review of my PhD until date), internal seminar, University of Surrey, UK. Given 11/05/20. Recorded virtually and available here <https://youtu.be/eIG4FFSVHNw>.

2019 *About the diet of galaxies*, invited talk, Institute of Physics lectures, University of Surrey, UK. Given 12/11/19.

SMASHing The Small Magellanic Cloud, contributed poster and flash talk, Small Galaxies, Cosmic Questions, Durham, UK. 29/7/19–2/8/19.

SMASHing the SMC: Investigating its profile, contributed talk, Student-led conference: From Infinity to Zero: A History of the Universe in Redshift, University of Southampton, Southampton, UK. 3/4/19–5/4/19.

SMASHing the SMC, contributed talk, Collaboration meeting MSSL-Surrey, Guildford, UK. Given 1/3/19.

- 2018 *SMASHing the SMC: Exploring the Outskirt*, invited talk, Lunch Talk, Astrophysics Group, University of Surrey, Guildford, UK. Given 4/6/18.

Service & Outreach

2017–2020 **Journal Club organiser for Surrey Astrophysics Group**

Applicant and Open day student helper

Giving Telescope tours to potential University of Surrey Undergraduate Students.

Volunteer, Surrey Stargazing Public Events

Answering questions about general astronomy and running Telescope Tours.

2018 **Surrey Stargazing speaker**

Facilitated a talk about the evolution of observational astronomy to the general public.

Other Skills & Qualifications

Programming

Python, Shell Script, Fortran, L^AT_EX

Languages

English (fluent)

Catalan (native speaker)

Spanish (native speaker)

References

The following people have kindly agreed to write references for me:

- **Dr. Noelia Noël**, PhD supervisor, University of Surrey.
Email: n.noel@surrey.ac.uk
- **Dr. David L. Nidever**, collaborator, Montana State University.
Email: david.nidever@montana.edu
- **Dr. Denis Erkal**, PhD co-supervisor, University of Surrey.
Email: d.erkal@surrey.ac.uk