

Andrew Steven Graus

PERSONAL INFORMATION

ADDRESS: Department of Physics and Astronomy
University of California, Irvine
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Irvine, CA 92617
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RESEARCH EXPERIENCE

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|----------------------|---|
| JUNE 2013 - PRESENT | 5 th year Graduate Student at The University of California, Irvine
<i>Theoretical galaxy formation</i>
Running and analysis of large cosmological simulations with the aim of studying the Local Group, with an emphasis on the dwarf galaxies of the Local Group. |
| MAY 2010 - JUNE 2012 | Undergraduate Research Assistant at the University of Michigan, Ann Arbor
<i>Observational properties of OB stars in nearby galaxies</i>
Reduction and analysis of OB stellar spectra for the Runaways and Isolated O Type Star Spectroscopic Survey of the SMC (RIOTS4). With the aim of measuring the IMF and properties of isolated OB stars in the Small Magellanic Cloud |

EDUCATION

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| JUNE 2012 - PRESENT | Doctor of Philosophy in Physics and Astronomy
The University of California, Irvine |
| AWARDED MAY 2012 | Bachelor of Science in Astronomy and Astrophysics
The University of Michigan, Ann Arbor
Graduated with High Honors |

PUBLISHED FIRST AUTHOR WORKS

Graus, A. S., Bullock, J. S., Boylan-Kolchin, M., & Weisz, D. R. 2016, Push it to the limit: Local Group constraints on high-redshift stellar mass functions for $M_* > 10^5 M_\odot$, *MNRAS*, 456, 477 ([ADS link](#))

Graus, A. S., Lamb, J. B., & Oey, M. S. 2012, Discovery of New, Dust-poor B[e] Supergiants in the Small Magellanic Cloud, *ApJ*, 759, 10 ([ADS link](#))

PUBLISHED COAUTHOR WORKS

Garrison-Kimmel, S., Wetzel, A., Bullock, J. S., ... , *Graus, A. S.* and Kelley, T. 2017, Not so lumpy after all: modelling the depletion of dark matter subhaloes by Milky Way-like galaxies, *MNRAS*, 471, 1709 ([ADS link](#))

Elbert, O. D., Bullock, J. S., Kaplinghat, M., Garrison-Kimmel, S, *Graus A. S.*, Rocha, M. 2016, A Testable Conspiracy: Simulating Baryonic Effects on Self-Interacting Dark Matter Halos arXiv:1609.08626 ([ADS link](#))

Golden-Marx, J. B., Oey, M. S., Lamb, J. B., *Graus, A. S.*, & A. S White 2016, Classical Oe Stars in the Field of the Small Magellanic Cloud, *Apj*, 819, 55.
([ADS link](#))

Lamb, J. B., Oey, M. S., Segura-Cox, D. M., *Graus, A. S.*, Kiminki, D. C., Golden-Marx, J. B., & Parker, J. Wm. 2016, The Runaways and Isolated O-Type Star Spectroscopic Survey of the SMC (RIOTS4), *ApJ*, 817, 113 ([ADS link](#))

Oey, M. S., Lamb, J. B., Kushner, C. T., Pellegrini, E. W., & *Graus, A. S.* 2013, A Sample of OB Stars that Formed in the Field, *ApJ*, 768, 66
([ADS link](#))

Lamb, J. B., Oey, M. S., *Graus, A. S.*, Adams, F. C., & Segura-Cox, D. M. 2013, The Initial Mass Function of Field OB Stars in the Small Magellanic Cloud, *ApJ*, 763, 101
([ADS link](#))

PUBLISHED CONFERENCE PROCEEDINGS

Graus, A. S., Oey, M. S., & Lamb, J. B. 2017, The B[e] Phenomenon: Forty Years of Studies, ASP Conference Series, 508, 273.
([ADS link](#))

Golden-Marx, J. B., Oey, M. S., Lamb, J. B., & *Graus, A. S.* 2014 (arXiv:1411.3185), 'Bright Emissaries: Be Stars as Messengers of Star Disk Physics', eds. T.A.A. Sigut & C.E. Jones, ASP Conference Series. 8 pages, 4 figures.
([ADS link](#))

Lamb, J. B., Oey, M. S., *Graus, A. S.*, & Segura-Cox, D. M. 2012, The IMF of Field OB Stars in the Small Magellanic Cloud, Proceedings of a Scientific Meeting in Honor of Anthony F. J. Moffat, 465, 440.
([ADS link](#))

CONFERENCES AND PRESENTATIONS

talk - Graus, A. S., Bullock, J. S., Boylan-Kolchin, M., & Weisz, D. R. What do we measure when we measure star formation histories. Talk given at The 2017 Santa Cruz Galaxy Workshop. Santa Cruz, CA. August 7- 11,2017.
([conference website](#))

talk - Graus, A. S., Bullock, J. S., Boylan-Kolchin, M., & Weisz, D. R. What do we measure when we measure star formation histories. Talk given at Astronomy in the 2020s: Synergies with WFIRST. Balitimore, MD. June 26- 28,2017.
([conference website](#))

talk - Graus, A. S., Bullock, J. S. The Effect of Baryonic Physics on Substructure Lensing. Talk given at The 2016 Santa Cruz Galaxy Workshop. Santa Cruz, CA. August 8- 12,2016.
([conference website](#))

talk - Graus, A. S., Oey, M. S., Lamb, J. B., A new subclass of B[e] supergiants in the SMC?. Talk given at The B[e] Phenomenon: Forty Years of Studies. Prague, Czech Republic. June 27- July 1,2016.
([conference website](#))

talk - Graus, A. S., Bullock, J. S., Boylan-Kolchin, M., & Weisz, D. R. The Local Group as a Time Machine. Talk given at The 13th Potsdam Thinkshop: Near Field Cosmology. Obergurgl, Tyrol Austria. March 29- April 3,2016.
([conference website](#))

talk - Graus, A. S., Bullock, J. S., Boylan-Kolchin, M., & Weisz, D. R. The Local Group as a Time Machine. Talk given at The Reionization Epoch: New Insights and Future Prospects. Aspen, CO. March 6-12, 2016.

([conference website](#))

talk - Graus, A. S., Bullock, J. S., Boylan-Kolchin, M., & Weisz, D. R. Push it to the limit: Local Group constraints on high-redshift stellar mass functions for $M_* > 10^5 M_\odot$. Talk given at the 2015 Santa Cruz Galaxy Workshop. Santa Cruz, CA. August 17-21, 2015.

([conference website](#))

poster - Graus, A. S., Bullock, J. S., Boylan-Kolchin, M., & Weisz, D. R., Local Group Constraints on High Redshift Stellar Mass Functions. Poster presented at the Local Group Astrostatistics Conference. Ann Arbor, MI. June 1-4, 2015.

poster - Graus, A. S., Lamb, J.B., Oey M.S. Discovery of three new B[e] Stars in the Small Magellanic Cloud. Poster was presented at the 219th meeting of the American Astronomical Society. Austin, TX. January, 2012.