

Andrew Steven Graus

PERSONAL INFORMATION

ADDRESS: Department of Physics and Astronomy
University of California, Irvine
2142 Frederick Reines Hall
Irvine, CA 92617
EMAIL: agraus@uci.edu

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 $M_{\star} > 10^5 M_{\odot}$, *MNRAS*, 456, 477 (<http://adsabs.harvard.edu/abs/2016MNRAS.456..477G>)
- 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 (<http://adsabs.harvard.edu/abs/2012ApJ...759...10G>)

PUBLISHED COAUTHOR WORKS

- 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 (<http://adsabs.harvard.edu/abs/2016arXiv160908626E>)
- 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. (<http://adsabs.harvard.edu/abs/2016ApJ...819...55G>)

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 (<http://adsabs.harvard.edu/abs/2016ApJ...817..113L>)

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
(<http://adsabs.harvard.edu/abs/2013ApJ...768...66O>)

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
(<http://adsabs.harvard.edu/abs/2013ApJ...763..101L>)

PUBLISHED CONFERENCE PROCEEDINGS

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

Golden-Marx, J. B., Oey, M. S., Lamb, J. B., & *Graus, A. S.* 2014 (arXiv:1411.3185), To appear in the proceedings of '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

CONFERENCES AND PRESENTATIONS

talk - *Graus, A. S.*, Bullock, The Effect of Baryonic Physics on Substructure Lensing. Talk given at The 2016 Santa Cruz Galaxy Workshop. Santa Cruz, CA. August 8- 12,2016.
(<http://hipacc.ucsc.edu/GalaxyWorkshop2016.html>)

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.
(<https://sites.google.com/site/bepstars2016/>)

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.
(<http://transidee-conference.uibk.ac.at/NFCosmology2016/>)

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.
(http://firstgalaxies.org/aspen_2016/)

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.
(<http://hipacc.ucsc.edu/GalaxyWorkshop2015.html>)

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.

OUTREACH, TEACHING, AND VOLUNTEER WORK

January 2014 - Present	Volunteer for the Astronomy Outreach Program at The University of California, Irvine
July - August 2012	California State Summer School for Mathematics and Science (COSMOS), Teaching Assistant
August 2012 - December 2013	Astronomy Outreach Teaching Assistant at the University of California, Irvine
May 2010 - May 2011	President of the Student Astronomical Society at The University of Michigan
May 2010 - August 2011	Volunteer for the Detroit Observatory
January 2010 - May 2012	Tutor for the Department of Astronomy and Astrophysics the University of Michigan
March 2009 - May 2012	Volunteer for the Student Astronomical Society at the University of Michigan