

FERAH MUNSHI

Curriculum Vitae

Department of Physics & Astronomy
 Rutgers University
 136 Frelinghuysen Rd.
 Piscataway, NJ

Contact Information
 web: www.nhn.ou.edu/~munshi
 e-mail: ferahmunshi@gmail.com
 US Citizen

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| Education | UNIVERSITY OF WASHINGTON Ph.D. in Astronomy Thesis Title: "Star Formation in Cosmological N-body Simulations" Thesis Advisor: Thomas Quinn | Dec 2013 |
| | UNIVERSITY OF WASHINGTON M.S. in Astronomy | Sept 2010 |
| | UNIVERSITY OF CALIFORNIA, BERKELEY B.A. in Astrophysics | Dec 2007 |
| Research Interests | Near-Field Cosmology, Galaxies, Star Formation, Stellar IMF, Big Data | |
| Postdoctoral Appointments | VIDA POSTDOCTORAL FELLOW, VANDERBILT UNIVERSITY | Jan 2017- |
| | VISITING POSTDOCTORAL RESEARCHER, RUTGERS UNIVERSITY | Jan 2016-July 2016 |
| | POSTDOCTORAL RESEARCHER, U. OKLAHOMA | Jan 2014-Dec. 2016 |
| Pre-Doctoral Appointments | GRADUATE STUDENT RESEARCHER, U. WASHINGTON Supervisors: Fabio Governato & Tom Quinn | 2010 – 2013 |
| | COURSE INSTRUCTOR, U. WASHINGTON, PRE-MAP | 2011 |
| | GRADUATE RESEARCH ASSISTANT, U. WASHINGTON Supervisor: Suzanne Hawley | 2009 |
| | TEACHING ASSISTANT, U. WASHINGTON Astro 101 & Astro 150 | 2008-2009 |
| | RESEARCH ASSOCIATE, SPITZER SCIENCE CENTER Supervisor: Kartik Sheth | Summer 2008 |
| | RESEARCH ASSOCIATE, UC BERKELEY Supervisor: Saul Perlmutter & Nao Suzuki | 2006-2008 |

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| | REU STUDENT, NOAO Supervisor: Lucas Macri | Summer 2007 |
| | RESEARCH INTERN, CFA Supervisor: Karen Masters & John Huchra | Summer 2006 |
| Invited Talks | <p>March 2016: Seminar Talk, Rutgers <i>Ali Baba & The 40 Thieves</i></p> <p>Feb. 2016 Seminar Talk, AMNH <i>Ali Baba & the 40 Thieves: A High Resolution Simulation of Dwarf Galaxies</i></p> <p>September 2015: Lunch Talk, UCL <i>The 40 Thieves: A High Resolution Simulation of Dwarf Galaxies</i></p> <p>February 2015 Seminar Talk, Harvard University <i>The 40 Thieves: A High Resolution Simulation of Dwarf Galaxies</i></p> <p>November 2014: Seminar Talk, University of California, Irvine <i>Star Formation in Dwarf Galaxies</i></p> <p>November 2014: Seminar Talk, University of California, Riverside <i>Star Formation in Dwarf Galaxies</i></p> <p>October 2012: Colloquium, Marquette University <i>Star Formation in Dwarf Galaxy Simulations</i></p> | |
| Selected Talks | <p>October 2015: Contributed Talk, GMT Science Meeting <i>The 40 Thieves: A High Resolution Simulation of Dwarf Galaxies</i></p> <p>September 2015: Contributed Talk, IoA, Cambridge University- Modelling Galaxies <i>The 40 Thieves: A High Resolution Simulation of Dwarf Galaxies</i></p> <p>June 2015: Contributed Talk, University of Michigan- Astrostatistics <i>The 40 Thieves: A High Resolution Simulation of Dwarf Galaxies</i></p> <p>Feb. 2015: Theory Lunch, University of Maryland</p> <p>Feb. 2015: Galaxy Journal Club, STScI</p> <p>November 2014: Lunch Talk, Caltech <i>Star Formation in Dwarf Galxies</i></p> <p>August 2014: Contributed Talk, UCSC (<i>very</i>) <i>Initial Results from an Extremely high-resolution Dwarf Galaxy Simulation</i></p> <p>August 2013: Contributed Talk, UCSC <i>Pressure of the Star Forming ISM</i></p> <p>October 2012: Lunch Talk, University of Wisconsin, Madison <i>Star Formation in N-body Dwarf Galaxy Simulations</i></p> <p>Summer 2012: Lunch Talk, University of Arizona <i>Star Formation in Dwarf Galaxies</i></p> | |
| Honors, Awards & Grants | <p>PI VIDA Postdoctoral Fellowship, Jan. 2017- Jan. 2020, (\$240,000)</p> <p>Co-I HST Theory Grant [current] (\$84,000)</p> <p>Co-PI NSF OU Physics REU Grant [2014,2015] (~\$267,000)</p> <p>PI International Travel Grant, Fall 2015 (\$1,200)</p> <p>Doxsey Thesis Prize Recipient, AAS Jan. 2014 (\$1,000)</p> <p>PI Washington NASA Space Grant, Fall 2013 (\$10,000)</p> <p>PI International Travel Grant, Winter 2013 (\$1,400)</p> <p>NSF Graduate Research Fellowship, Honorable Mention, 2008-2009</p> <p>PI ARCS Fellowship, 2008-2010 (\$15,000)</p> <p>Chambliss Medal at AAS 2007</p> | |
| Refereed Publication List | | |

- **Munshi, F.; Brooks, A.; Teyssier, M. Feedback-driven Radial Gradients in Dwarf Galaxies** MNRAS, in-preparation
- **Munshi, F.; Brooks, A.; Governato, F.; Quinn, T.; Wadsley, J. Going, Going, Gone Dark: The Scatter in the Faintest Dwarf Galaxies** MNRAS, submitted
- Christensen, Charlotte R.; Dave, R.; Governato, F.; Pontzen, A.; Brooks, A.; **Munshi, F.; Quinn, T.; Wadsley, J. In-N-Out: the gas cycle from dwarfs to spiral galaxies**; 2015,ApJ, in press
- Bellovary, J.; Holley-Bockelmann,K.; Gultekin, K.;Christensen, C.; Loebman, S.; **Munshi, F. Effects of Inclination on Measuring V elocity dispersion and Implications for Black Holes**; 2014,MNRAS,445,2667B
- **Munshi, F.; Governato, F.; Christensen, C.; Loebman, S.; Quinn, T.; Shen, S.; Wadsley, J. The Pressure of the Star Forming ISM in Cosmological Simulations**; 2014,ApJL,781,14
- **Munshi, F.; Brooks, A.;Governato, F.; Christensen, C.; Shen, S; Loebman, S.; Moster, B; Quinn, T.; Wadsley, J. Reproducing the Stellar Mass/Halo Mass Relation in Simulated LCDM Galaxy Theory vs. Observati onal Estimates**; 2013,ApJ,766,56
- Davenport, J.; Becker, A.; West, A.; Bochanski, J.; Hawley, S.; Holtzmann, J.; Gunning, H.; Hilton, E.; **Munshi, F.; Albright, M. The Very Short Period M Dwarf Binary SDSS J001641-000925**; 2013, ApJ,764,62
- Suzuki, N.; Rubin, D.; Lidman, C.; Aldering, G.; Amanullah, R.; Barbary, K.; Barrientos, L. F.;[...]**Munshi,F.,[...]**Strovink, M.; Takanashi, N.; Tokita, K.; Wagner, M.; Wang, L.; Yasuda, N.; Yee, H. K. C.; Supernova Cosmology Project, The **The Hubble Space Telescope Cluster Supernova Survey. V. Improving the Dark-energy Constraints above $z > 1$ and Building an Early-type-hosted Supernova Sample**; 2012, ApJ,746,85
- Dawson, K. S.; Aldering, G.; Amanullah, R.; Barbary, K.; Barrientos, L. F.; Brodwin, M.; Connolly, N.[...] **Munshi, F.; Mullis, C.; Oda, T.; Panagia, N.; Perlmutter, S.; Postman, M.; Pritchard, T.;[...]** Yee, H. K. C. “**An Intensive Hubble Space Telescope Survey for $z>1$ Type Ia Supernovae by Targeting Galaxy Clusters**”, 2009, AJ, 138,1271

Unrefereed Publication List

- Rosenfield, Philip; Loebman, S. R.; Hilton, E. J.; Garner, S.; Agol, E.; Bellovary, J. M.; Christensen, C. R.; Cowan, N. B.; Gogarten, S. M.; Haggard, D.; **Munshi, F. A.; Schmidt, S. J.; Stilp, A. M.; Agueros, M. A.; Covey, K. R.; West, A. A.; Carroll, P.; Murphy, J., “Tools for Increasing Undergraduate Diversity in Your Department”**, Astro2010 Decadal Survey Position Papers (no. 38)
- Norman, Dara; Ernst, David J.; Agueros, Marcel; Anderson, Scott F.; Baker, Andrew; Burgasser, Adam; Cruz, Kelle; Gawiser, Eric; Krishnamurthi, Anita;[...]Gogarten, Stephanie; Stilp, Adrienne; Christensen, Charlotte; Hilton, Eric; Haggard, Daryl; Loebman, Sarah; Rosenfield, Phil; **Munshi, Ferah, “Increasing the Number of Underrepresented Minorities in Astronomy Through K-12 Education and Public Outreach (Paper I and II)”**, Astro2010 Decadal Survey Position Papers (no. 39, 40)

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| Equity & Education Activities | UNIVERSITY OF OKLAHOMA REU COORDINATOR | Summer 2014, 2015 |
| | UNIVERSITY OF OKLAHOMA ASTRO-PH DISCUSSION LEADER | Winter 2014-present |
| | PRE-MAJOR IN ASTRONOMY PROGRAM (PRE-MAP) RESEARCH MENTOR | Fall 2009, Winter 2010 |
| | PRE-MAP COURSE INSTRUCTOR | Fall 2011 |
| | PRE-MAP FIELD TRIP COORDINATOR | Spring 2011 |
| | PRE-MAP MEETING SECRETARY | Fall 2010 – Spring 2010 |
| | PRE-MAP DIVERSITY JOURNAL CLUB ORGANIZER | Winter 2013-Winter 2014 |
| | UNIVERSITY OF WASHINGTON ASTRONOMY DEPARTMENT INTERNATIONAL YEAR OF ASTRONOMY EVENT ORGANIZER | Winter 2009-Spring 2009 |
| Students Advised | TIM BERRY, TIM KRUSE RYAN WESTERDAHL DANNY WELLER SYDNEY DUNCAN | Fall 2009 Winter 2010 REU student, Summer 2014 REU student, Summer 2015 |
| Collaborators | Alyson Brooks (Rutgers), Peter Behroozi (STScI), Jillian Bellovary (AMNH), Charlotte Christensen (Grinnell), Fabio Governato (UW), Sarah Loebman (UM), Piero Madau (UCSC), Ben Moster (MPIA), Tom Quinn [Thesis Adviser] (UW), Sijing Shen (IoA), Brian Siana (UCR), James Wadsley (McMaster), Dan Weisz (UCB), Kelly Holley-Bockelman (Vanderbilt) | |
| References | Assistant Professor Daniel Weisz UC Berkeley dweisz@uw.edu | |
| | Professor Thomas Quinn University of Washington trq@astro.washington.edu | |
| | Assistant Professor Alyson Brooks Rutgers University abrooks@physics.rutgers.edu | |