

Drummond B. Fielding

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EDUCATION

- Ph.D., Astrophysics** 2018 (expected)
University of California, Berkeley
Advisor: Eliot Quataert
Thesis: The Multi-Phase CGM and Galactic Winds
- Master of Arts, Astrophysics** 2014
University of California, Berkeley
- Bachelors of Arts, Physics & Bachelors of Arts, Mathematics** 2012
Johns Hopkins University

RESEARCH INTERESTS

- Understanding the bulk properties and phase structure of the circumgalactic medium in relation to the properties and evolution of the central host galaxy.
- The driving of galactic winds by the collective effect of numerous clustered supernovae.
- Mixing in marginally collisional trans- and sub-sonic shear flows.

AWARDS & HONORS

- Outstanding Graduate Student Instructor Award 2013 - 2014
National Science Foundation Graduate Research Fellow 2014 - 2017 (awarded 2012)
Berkeley Fellow for Graduate Study 2012 - 2014
Donald E. Kerr award for Outstanding Physics Undergraduate (JHU) 2012

GRANTS

- APS-IUSSTF Physics Ph.D. Student & Postdoc Visitation Program 2016
U.S.-India Travel Grant to Indian Institute of Science with Prof. Prateek Sharma
- Hubble Space Telescope cycle 25 Theory Grant 2017
Towards an Understanding of the Origin of OVI in the Circumgalactic Medium
PI: Michael McCourt, Co-Is: Drummond Fielding, Peng Oh, Crystal Martin
- NSF Extreme Science and Engineering Discovery Environment (XSEDE) 2016-2017
TG-AST160020 — 775,784 SUs on COMET
The Physics of Supernova Feedback: Global 3D Simulations of Galactic Disks
PI: Davide Martizzi, Co-Is: Drummond Fielding, Eliot Quataert
- NSF Extreme Science and Engineering Discovery Environment (XSEDE) 2016-2017
TG-AST140083 — 1,159,956 SUs on Stampede
Conduction, Convection, and Thermal Instability in Hot Halos
PI: Michael McCourt, Co-I: Drummond Fielding

PROFESSIONAL SERVICE & TEACHING

- Referee: ApJL, MNRAS since 2016
Graduate Student Instructor: Astronomy 7A 2013
Graduate Student Instructor: Astronomy C12 'The Planets' 2012

SELECT PRESENTATIONS

Lunch Talk U.C. Berkeley Astronomy Department (9/2017)
Contributed Talk, U.C. Santa Cruz Galaxy Workshop (8/2017)
IMPS, U.C. Santa Cruz (5/2017)
Astronomy Seminar, Raman Research Institute (12/2016)
Astronomy Department Colloquium, Indian Institute of Science (10/2016)
Lunch Talk U.C. Berkeley Astronomy Department (10/2016)
Astronomy Seminar U.C. Santa Barbara (9/2016)
Contributed Talk, Crossing the Rubicon (9/2016)
Contributed Talk, U.C. Santa Cruz Galaxy Workshop (8/2016)
Galaxy Group Seminar, University of Michigan (3/2016)
Lunch Talk U.C. Berkeley Astronomy Department (12/2013)

PUBLICATIONS

FIRST AUTHOR

Drummond B. Fielding, Eliot Quataert, Davide Martizzi, and Claude-André Faucher-Giguère, *How Supernovae Launch Galactic Winds*, MNRAS, letters, 470, 39 (2017)

Drummond B. Fielding, Eliot Quataert, Mike McCourt, and Todd Thompson *The Impact of Star Formation Feedback on the Circumgalactic Medium*, MNRAS, 466, 3810 (2017)

Drummond B. Fielding, Christopher McKee, Aristotle Socrates, Andrew J. Cunningham, and Richard I. Klein, *The Turbulent Origin of Spin-Orbit Misalignment in Planetary Systems*, MNRAS, 450, 3306 (2015)

CONTRIBUTING AUTHOR

Davide Martizzi, **Drummond B. Fielding**, Claude-André Faucher-Giguère, and Eliot Quataert, *Supernova Feedback in a Vertically Stratified Medium: Interstellar Turbulence and Galactic Wind Launching*, MNRAS, 459, 2311 (2016)

Stella S. R. Offner, Michael M. Dunham, Katherine I. Lee, Hector G. Arce, and **Drummond B. Fielding**, *The Turbulent Origin of Outflow and Spin Misalignment in Multiple Star Systems* ApJ, 827L, 110 (2016)

J. E. Schlieder, S. Lépine, E. Rice, M. Simon, **Drummond B. Fielding**, and R. Tomasino, *The Na 8200 Å Doublet as an Age Indicator in Low-mass Stars*, AJ, 143, 114 (2011)