

Angela Collier

<http://acollierastro.com/>
JILA, University of Colorado, Boulder, CO 80309-0440

angela.collier@colorado.edu
(303)735-6013

Employment	JILA/University of Colorado Boulder Postdoctoral Researcher Eccentric Dynamics (Dr. Ann-Marie Madigan Group)	2019 -
Education	University of Kentucky PhD, Physics Thesis: <i>The Role of Angular Momentum in the Interplay Between Disk Galaxies and Their Host Dark Matter Halos: Corollaries for the Hubble Fork Diagram</i> Advisor: Dr. Isaac Shlosman	2019
	University of Kentucky MS, Physics	2017
	Morehead State University BS, Physics and Mathematics	2012
Research Areas	<i>Computational and theoretical dynamics, Physics of instabilities, Chaos and nonlinear dynamics</i>	
Publications	<ol style="list-style-type: none">5. "Apsidal Clustering following the Inclination Instability", Zderic, Alexander; Collier, Angela; Tiongco, Maria; Madigan Ann-Marie; Accepted to ApJL4. "Violent Buckling Benefits Galactic Bars", Collier, Angela; MNRAS, 2020, MNRAS, 492, 22413. "Stellar Bars in Counter-Rotating Dark Matter Halos: The Role of Halo Orbit Reversals", Collier, Angela; Shlosman, Isaac; Heller, Clayton, 2019, MNRAS, 489, 31022. "Dark Matter Bars in Spinning Halos", Collier, Angela; Shlosman, Isaac; Heller, Clayton, 2019, MNRAS, 488, 57881. "What Makes the Family of Barred Disk Galaxies So Rich: Damping Stellar Bars in Spinning Halos", Collier, Angela; Shlosman, Isaac; Heller, Clayton, 2018, MNRAS, 476, 1331	
Conference Publications	<ol style="list-style-type: none">2. "Evolution of Dark Matter Bars in Spinning Halos", Collier, Angela 2019, AAS Bulletin, Volume 233, 106.021. "Asymmetry in Supernovae", Collier, Angela; Bachrach, Harrison; Fryer, Chris; Ellinger, Carola; 2017, AAS Bulletin, Volume 229, 434.08	
Talks (Invited)	CASA/JILA Seminar, Boulder, CO; November 2019 High Energy Physics Special Seminar, Argonne National Lab; December 2018 Sandia National Laboratory; November 2018 University of Kentucky Astrophysics Seminar; March 2018 University of Kentucky Astrophysics Seminar; September 2016	

Talks (Contributed)	AAS Kentucky Area Meeting 2019, Morehead, KY; April 2019 AAS 223, Seattle, WA; January 2019 HPC Conference, University of Kentucky; October, 2017 Computational Physics Workshop, Los Alamos National Laboratory; July 2016	
Workshops	Aspen Center for Physics 2020 Summer Program Aspen Center for Physics Accepted (Canceled due to COVID-19)	2020
	Front Range Industry & Postdoc Summit University of Colorado at Boulder	2019
	Computational Physics Student Summer Workshop Los Alamos National Laboratory Advisor: Dr. Chris Fryer	2016
Teaching Experience	Instructor of Record at CU Boulder ASTR 2040: The Search for Life in the Universe	Summer 2020
	Guest Lecturer Introductory Astronomy (University of Kentucky)	2017-2019
	AST 592: Galaxies and Interstellar Material (University of Kentucky)	2018-2019
	Teaching Assistant Introductory Physics Labs and Recitation (University of Kentucky)	2013-2019
	High School Physics Teacher Advanced Physics Course (P.L. Dunbar High School)	2012-2013
Outreach	Macadam Student Observatory University of Kentucky Hosted observing nights for the public, provided research opportunities for high school and undergraduate students.	2014-2019
	Outreach Talks <ul style="list-style-type: none"> • <i>Galactic Navigation: A Tourist's Guide to Traveling the Milky Way</i> Fiske Planetarium; February 2020 • <i>So you want to be an astronomer?</i> University of Kentucky Skytalk; August 2018 • <i>The Smallest Stars</i> University of Kentucky Skytalk; September 2017 • <i>Pandora's Cluster: Abell 2744</i> University of Kentucky Skytalk; February 2017 • <i>The Search for Planet X</i> University of Kentucky Skytalk; June 2016 • <i>Galactic Navigation</i> University of Kentucky Skytalk; August 2015 	
Academic Service	AAS CVD: Congressional Visit Day, Washington, DC AAS 223: Chambliss Poster Judge, Seattle, WA	March 2019 Winter 2019
	University of Kentucky Lexington, KY Physics Department: <ul style="list-style-type: none"> • Astrophysics Journal Club Coordinator: http://www.pa.uky.edu/accollier/journalclub • Macadam Student Observatory Committee: Graduate Assistant Member • Physics Graduate Student Committee: Astrophysics Representative 	
Professional Memberships	American Astronomical Society Division of Dynamical Astronomy	
Awards and Honors	2016, 2018: Huffaker Travel Scholarship 2017: University of Kentucky HPC Conference Prize Winner 2016: Summer Fellowship at LANL Computational Physics Summer Workshop 2011: REU Fellowship Thomas Jefferson National Lab 2008-2012: Morehead State University Presidential Scholarship 2008-2012: Morehead State University Honors Scholarship	