Curriculum Vitae

Jasmine Therese Brewer

CONTACT INFORMATION

jasmine.brewer@colorado.edu
Ph: (406) 640-1916

2900 College Ave. #10
Boulder, CO 80303

EDUCATION

University of Colorado at Boulder, Boulder, CO ..... 2011 - Present
Anticipated Graduation May 2015
B.S. Engineering Physics, Minor: Mathematics
GPA 3.95/4.0

HONORS AND AWARDS

Barry M. Goldwater Scholar 2014
Astronaut Scholarship Foundation finalist, University of Colorado at Boulder 2014
Presidential Scholar, University of Colorado at Boulder ..... 2011 - Present
Merit Scholar, College of Engineering and Applied Science ..... 2011 - Present
Engineering Honors Program (EHP) member ..... 2011 - Present

RESEARCH

Nuclear Theory and Computational Hydrodynamics ..... 2013 - Present
Asst. Professor Paul Romatschke, University of Colorado at Boulder
Project Title - Hydrodynamics of Cold Quantum Gases at Unitarity

Theoretical Magnetohydrodynamics ..... Summer 2014
Professor Dana Longcope, Montana State University Bozeman
NSF Research Experiences for Undergraduates Program
Project Title - Simulating Shocks in Solar Flares

Liquid Crystal Materials Research Center ..... 2012 - 2013
Asst. Professor Ivan Smalyukh, University of Colorado at Boulder
Project Title - Particle Interactions in Continuous Fields

Optical Remote Sensing Laboratory ..... Summers 2012, 2013
Professor Joseph Shaw, Montana State University Bozeman
NSF Research Experiences for Undergraduates Program
Project Title 2013 - Quantitative Image Analysis Algorithms for Airborne Imaging of CO_2 Sequestration Sites
Project Title 2012 - Design of an Optoelectronic System to Detect the Aurora Borealis

SERVICE AND OUTREACH

CU Prime (CU') ..... 2013 - Present
Colorado Space Grant Consortium ..... 2011 - 2012

PUBLICATIONS

1. M.B. Pandey, T. Porenta, **J. Brewer**, A. Burkhart, S. Čopar, S. Žumer, and Ivan. I. Smalyukh. "Self-assembly of skyrmion-dressed chiral nematic colloids with tangential anchoring." *Phys. Rev. E 89, 060502 (2014)*

2. Joseph. A. Shaw, Paul W. Nugent, Sean Nicolaysen, and **Jasmine Brewer**. "Balloon-borne multispectral imaging of vegetation to detect CO_2 gas leaking from underground." *In preparation*

PRESENTATIONS

1. "Field-Controlled Interactions and Self-Assembly of Colloidal Particles in Confined Chiral Nematic Liquid Crystal" *Materials Science and Engineering Seminar* Spring 2013, University of Colorado at Boulder. Poster.

2. "Sensitive Optoelectronic Detection of the Aurora Borealis" *Optical Technology Center Conference* Summer 2012, Montana State University Bozeman. Poster.