

Jennifer A. Delgado

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EDUCATION

PhD, Astrophysics — *University of Minnesota, Twin Cities*, August 2007 - May 2013

Advisors: Terry Jones, Tom Jones

Bachelor of Science, Physics — *University of Missouri, Columbia*, August 2003 - May 2007

ACADEMIC EMPLOYMENT

University of Kansas, Lawrence

Associate Teaching Professor

Fall 2019 - PRESENT

Laboratory Program Director

Fall 2015 - Summer 2019

Lecturer

Summer 2013 - Summer 2015

Haskell Indian Nations University, Lawrence

Adjunct Professor

Fall 2014 - Spring 2015

University of Minnesota, Twin Cities

Universe in the Park Coordinator

October 2011-August 2012

Outreach Coordinator

July 2010 – July 2012

Astronomy Public Night Director

Fall 2008-Spring 2009

Graduate Teaching/Research Assistant

Fall 2007 - Spring 2013

COMPUTATIONAL SKILLS

In approximate order of proficiency (most proficient on left)

Languages: Fortran (77, 90, and 2008), Python, Javascript, LaTeX, C, BASH, HTML, CSS, Perl, IDL

Plotting Packages: Pyplot, Gnuplot, SM (Super Mongo)

Tools: Slack, SSH, SFTP, Cygwin, SVN, Git, Putty, NoMachine NX client, RealVNC

OS: Linux, Windows

RESEARCH PRODUCTS

Papers:

Matthew S. Richard, **Jennifer A. Delgado**, Sarah E. LeGresley, and Christopher J. Fischer

“Implementing Competency-Based Grading Improves The Performance of First Generation Students In Introductory Physics” Paper, submitted

Sarah E. LeGresley, **Jennifer A. Delgado**, Christopher R. Bruner, Michael J. Murray, and Christopher J. Fischer **“A Calculus-Enhanced Curriculum for Introductory Physics Improves Student Performance Locally and in Downstream Courses”** Phys. Rev. Phys. Educ. Res. 15, 2019

Presentations:

"Development of a Problem Set for an Assessment of Uncertainty Reasoning: ELUSA",
Contributed talk, AAPT Summer Meeting 2020

"Training TAs to Teach Non-traditional Labs", Contributed Poster, AAPT Winter Meeting 2020

"What is the Point of Physics Labs?" Invited Talk, AAPT AOK Regional Meeting, October 2019

"Student Evaluations are Data Too" Talk, Learning Analytics Summit, April 2019

"Logic and Quantitative Reasoning in an Introductory Astronomy Class" Talk, MARAC AAS Regional Meeting, 2019

"Using projectile launchers to teach uncertainty and modeling." Invited Demonstration, TRESTLE Annual Meeting, 2018

"Logic and Quantitative Reasoning in an Introductory Astronomy Class" Poster, AAPT Physics Education Research Conference, 2018

"Functional Functions: Transfer of Math to Physics Labs" Poster, KU CTE C21 Poster Session, 2018

"Quantitative Prediction in Physics Labs" Invited Talk, TRESTLE Quick Hits 2017

"Flipping Demonstrations in Lectures" Poster, KU CTE C21 Poster Session, 2017

"Superbubbles and Polarization" Talk, Midwest Magnetic Fields meeting, 2010

"Blowing Superbubbles with 3D MHD: Impact on Interstellar Polarization" Poster Presentation, January 2010 AAS meeting

"Attogram Dust as an explanation for IR excess in BD +20 307" Talk, St Louis Area Undergraduate Research Symposium, 2006 (authored as Jennifer Ortega)

"Obliquity Effects on Earth-like Exoplanet Signatures" Poster Presentation, January 2006 AAS meeting (authored as Jennifer Ortega)

Code:

Peter Mendygral, David Porter, Paul Edmon, **Jennifer Delgado**, **"WOMBAT: sWift Objects for Mhd BAseD on Tvd"** Astrophysical Code Repository, 2012

PROFESSIONAL AFFILIATIONS, SERVICE ROLES AND LEADERSHIP

Member - American Physical Society, 2020-Present

Member - American Astronomical Society, 2020-Present

Member - American Association of Physics Teachers, 2015-Present

Member - KU PHSX Undergraduate Committee, 2015 - Present

Member - KU PHSX Teaching Committee, 2014-Present

Member - KU Diversity in Physics, 2016-Present

Officer - Astronomy Associates of Lawrence, 2018-Present, Member since 2016

Officer - Women in Physics and Astronomy (WIPA) at UMN, 2008-2009

HONORS AND AWARDS

UMN Astronomy Department Fellowship

UMN Outreach Service Award

Samuel L. Laws Astronomical Award

Missouri Bright Flight Scholarship

UMN Best Astronomy Department TA Award

Eli Stuart & Nola Anderson Haynes Scholarship

Newell S. Gingrich Scholarship

Honorary "Sky Search" Girl Scout Badge