

Anna Su-en Kwa

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Department of Physics & Astronomy
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EDUCATION **University of California, Irvine, Irvine, CA**
Ph.D. Candidate, Physics & Astronomy, (expected graduation: 2017)
Advisor: Manoj Kaplinghat

The Ohio State University, Columbus, OH
B.S., Physics & Astronomy, *summa cum laude*, June 2011

RESEARCH INTERESTS Indirect detection of dark matter: signatures and constraints via gamma-rays and cosmic rays

Astrophysical and cosmological signatures of self-interacting dark matter

High-energy astrophysics: millisecond pulsars, cosmic ray propagation

- PUBLICATIONS
1. Kevork N. Abazajian, Nicolas Canac, Shunsaku Horiuchi, Manoj Kaplinghat, and **Anna Kwa**. Discovery of a New Galactic Center Excess Consistent with Upscattered Starlight. *JCAP*, 1507 (07):013, 2015, 1410.6168.
 2. (accepted to *JCAP*) Shunsaku Horiuchi, Manoj Kaplinghat, and **Anna Kwa**. Investigating the Uniformity of the Excess Gamma rays towards the Galactic Center Region. 2016, 1604.01402.
 3. (Under review) Kimberly K. Boddy, Manoj Kaplinghat, **Anna Kwa**, and Anika H. G. Peter. Hidden Sector Hydrogen as Dark Matter: Small-scale Structure Formation Predictions and the Importance of Hyperfine Interactions. 2016, 1609.03592.
 4. (Under review) Iftah Galon, **Anna Kwa**, and Philip Tanedo. Lepton-Flavor Violating Mediators. 2016, 1610.08060.

FELLOWSHIPS & AWARDS	National Science Foundation Graduate Research Fellowship	2014–2017
	Chancellor’s Fellowship for incoming graduate students (UC Irvine)	2012–2014
	Arts and Sciences Undergraduate Research Scholarship (Ohio State)	2011
	Pressey Honors Endowment Grant (Ohio State)	2011
	Distinguished Merit Scholarship (Ohio State)	2007–2011
	Provost Scholarship (Ohio State)	2007–2011
	Ohio Academic Scholarship (Ohio Board of Regents)	2007–2011

TEACHING EXPERIENCE	California State Summer School for Math & Science	2014, 2015, 2016
	<ul style="list-style-type: none"> • Teaching assistant for research sessions • Created research projects for high school students utilizing astrophysical datasets 	
	CSU Long Beach Physics GRE Bootcamp teaching assistant	2015
	<ul style="list-style-type: none"> • Weekend-long instruction in PGRE preparation for under-represented students 	
	Graduate teaching assistant, UC Irvine	Fall 2012 – Spring 2014
<ul style="list-style-type: none"> • Physics 3C, 3LC, 7C, 7LC, 17: Undergraduate introductory physics • Physics 121W: Undergraduate advanced lab • Physics 211: Graduate classical mechanics • Physics 213B: Graduate electromagnetism 		
Temporary lecturer, Ohio State	Fall 2011 – Spring 2012	
<ul style="list-style-type: none"> • Physics 132: Undergraduate introductory electromagnetism 		

OUTREACH & SERVICE	Peer mentor, UC Irvine Competitive Edge Summer Program	2016
	Undergraduate mentoring program, UC Irvine Women in Physics	2015 – present
	Organizing committee, UC Irvine Women in Physics	2014 – present
	Organizing committee, UC Irvine Physics Graduate Caucus	2014 – present
	UC Irvine Astronomy Outreach Program	2012 – present
	Counselor, Muscular Dystrophy Assoc. Summer Camp	2006–2008, 2010, 2011