

# Jennifer C. Ito

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## **CURRENT POSITION:**

Westmont College, Santa Barbara, CA  
Assistant Professor, Department of Physics and Engineering

August 2022 – Present

## **EDUCATION:**

University of California, San Diego, CA  
PhD, Physics – September 2022  
Master of Science, Physics – March 2018

University of California, Berkeley, CA  
Bachelor of Arts, Physics and Astrophysics (Double Major) – December 2015

Palomar College, San Marcos, CA  
Associate of Arts, Math and Engineering (Double Major) – May 2013  
Associate of Science, University Studies: Math & Science – May 2013  
Dean's List (3 semesters)

## **PUBLICATIONS:**

Nicole Farias, Megan Russell, Daisuke Kaneko, Sayuri Takatori, Adrian T. Lee, Kam Arnold, Tylor Adkins, Darcy R Barron, Kevin T. Crowley, Tucker Elleflot, Takuro Fujino, Masaya Hasegawa, Jennifer Ito, Lindsay N. Lowry, Yume Nishinomiya, Christopher Raum, Praween Siritanasak, Benjamin Westbrook, Kyohei Yamada. "On-site detector noise characterization of the POLARBEAR-2A receiver." 2022.

The POLARBEAR Collaboration. "Improved Upper Limit on Degree-scale CMB B-mode Polarization Power from the 670 Square-degree POLARBEAR Survey." 2022.

Segawa, Y. and the POLARBEAR Collaboration. "Method for rapid performance validation of large TES bolometer array for POLARBEAR-2A using a coherent millimeter-wave source." 2021.

Jennifer Ito, LN Lowry, T Elleflot, KT Crowley, L Howe, P Siritanasak, T Adkins, K Arnold, C Baccigalupi, D Barron, B Bixler, Y Chinone, J Groh, M Hazumi, CA Hill, O Jeong, B Keating, A Kusaka, AT Lee, K Mitchell, M Navaroli, ATP Pham, C Raum, CL Reichardt, TJ Sasse, J Seibert, A Suzuki, S Takakura, GP Teply, C Tsai, B Westbrook. "Detector and readout characterization for POLARBEAR-2b." 2020.

T Elleflot, K Arnold, D Barron, KT Crowley, M Dobbs, J Groh, M Hasegawa, M Hazumi, C Hill, L Howe, J Ito, O Jeong, D Kaneko, N Katayama, B Keating, A Kusaka, AT Lee, LN Lowry, C Raum, J Seibert, M Silva-Feaver, P Siritanasak, A Suzuki, S Takakura, S Takatori, C Tsai, B Westbrook. “Effect of Stray Impedance in Frequency-Division Multiplexed Readout of TES Sensors in POLARBEAR-2b.” 2020.

Jenny E Greene, Melanie Veale, Chung-Pei Ma, Jens Thomas, Matthew E Quenneville, John P Blakeslee, Jonelle L Walsh, Andrew Goulding, Jennifer Ito. “The MASSIVE Survey - XII. Connecting Stellar Populations of Early-type Galaxies to Kinematics and Environment.” 2019.

Irina Ene, Chung-Pei Ma, Melanie Veale, Jenny E Greene, Jens Thomas, John P Blakeslee, Caroline Foster, Jonelle L Walsh, Jennifer Ito, Andy D Goulding. “The MASSIVE Survey - X. Misalignment between Kinematic and Photometric Axes and Intrinsic Shapes of Massive Early-type Galaxies.” 2018.

Melanie Veale, Chung-Pei Ma, Jenny E. Greene, Jens Thomas, John P. Blakeslee, Jonelle L. Walsh, Jennifer Ito. “The MASSIVE Survey - VIII. Stellar Velocity Dispersion Profiles and Environmental Dependence of Early-Type Galaxies.” 2017.

Melanie Veale, Chung-Pei Ma, Jenny E. Greene, Jens Thomas, John P. Blakeslee, Nicholas McConnell, Jonelle L. Walsh, Jennifer Ito. “The MASSIVE Survey - VII. The Relationship of Angular Momentum, Stellar Mass and Environment of Early-Type Galaxies.” 2017.

Melanie Veale, Chung-Pei Ma, Jens Thomas, Jenny E. Greene, Nicholas J. McConnell, Jonelle Walsh, Jennifer Ito, John P. Blakeslee, Ryan Janish. “The MASSIVE Survey - V. Spatially-Resolved Stellar Angular Momentum, Velocity Dispersion, and Higher Moments of the 41 Most Massive Local Early-Type Galaxies.” 2016.

Faisal T. Abu-Nimeh, Jennifer Ito, William W. Moses, Qiyu Peng, Woon-Seng Choong. “Architecture and Implementation of OpenPET Firmware and Embedded Software.” *IEEE Transactions on Nuclear Science*. 2016.

## **RESEARCH EXPERIENCE:**

**Graduate Student Researcher** October 2017 – August 2022

Dr. Kam Arnold, Dept. of Physics, University of California, San Diego, CA

- Performed in-lab testing and analysis of millimeter wavelength detectors
- Lead the final in-lab integration tests of the completed millimeter wavelength instrument
- Deployed with the instrument to Chile for instrument commissioning

**Graduate Student Assistant** June 2017 – September 2017

Dr. Karin Sandstrom, Dept. of Physics, University of California, San Diego, CA

- Assisted in data analysis of heavy elements in Orion nebula

**Undergraduate Student Assistant** June 2015 – May 2016

Dr. Chung-Pei Ma, Dept. of Astronomy, University of California, Berkeley, CA

- Assisted in data analysis of a collection of one hundred early type galaxies
- Developed code to improve efficiency use of the program

**Student Assistant** June 2014 – May 2016  
Dr. Woon-Seng Choong, Lawrence Berkeley National Laboratory, Berkeley, CA

- Contributed in data analysis software development for positron emission tomography system
- Drafted and edited system documentation
- Tested system hardware and firmware

**Undergraduate Student Assistant** January 2014 – May 2014  
John Haberstroh, Dept. of Chemistry, University of California, Berkeley, CA

- Assisted in simulations of tobacco mosaic virus disk assembly

**TEACHING EXPERIENCE:**

Department of Physics, University of California San Diego, La Jolla, CA  
**Physics Instructor** June – July 2022

- Instructor of record for an undergraduate, lower division physics course
- Develop course and topic-level student learning outcomes with appropriate assessments

**Lab Teaching Assistant Coordinator** September 2017 – December 2017

- Train Lab Teaching Assistants weekly
- Edit Lab manual, revise and update experiments
- Supervise Teaching Assistants during labs
- Hold office hours to answer students' questions

**Lab Teaching Assistant** September 2016 – June 2017

- Instructor for physics lab exercises

Keypoint Education, Dublin, CA  
**Tutor** February 2016 – May 2016

- Taught students in preparation for ACT test
- Tutored student in physics after school

Department of Physics, Palomar College, San Marcos, CA  
**Supplemental Instruction (SI) Leader**

Principles of Physics (PHYS 231) August 2012 – May 2013  
Principles of Physics (PHYS 230) August 2011 – May 2012

- Held SI sessions that reinforced physics topics taught in lecture
- Prepared and executed lesson plans
- Discerned where students struggled in order to help them solve problems

**Learning Assistant** August – December 2012  
Principles of Physics (PHYS 231)

- Instructed students in experiment preparation
- Advised students during lab period
- Graded lab quizzes and reports

**STEM Center Tutor** March – May 2012 & August – December 2012  
Science, Technology, Engineering, and Math (STEM) Physics and Math tutor

## **PEDAGOGY PROGRAMS:**

**Recognition of Expertise in Equitable and Evidence-based Teaching** September 2021 – Present  
Teaching and Learning Commons  
University of California, San Diego

## **PEDAGOGY COURSES:**

**Intro to College Teaching** October – December 2021  
Teaching and Learning Commons  
University of California, San Diego

**Course Design Series** December 2021  
Teaching and Learning Commons  
University of California, San Diego

## **OUTREACH EXPERIENCE:**

### **Lab Tours:**

- Cuyamaca College Virtual Lab Tour , UC San Diego August 2021

### **Physics Department Exhibit Organizer and Volunteer Coordinator:**

- EXPO Day, Petco Park, CA March 2018, 2019, 2020
- Space Day, Balboa Park, CA May 2019
- Vista STEM Festival, Vista Unified School District, CA April 2018, May 2019
- STEM in Your Backyard, City Heights, CA February 2018

### **Event Participant:**

- Young Physicists Program, UC San Diego February 2018, October 2018, November 2019
- Tech Trek, UC San Diego June 2018
- High Tech Fair, Balboa Park, CA January 2018

## **CONFERENCES:**

SPIE Astronomical Telescopes + Instrumentation December 2020  
Virtual  
Poster presentation – “Detector and readout characterization for POLARBEAR-2b.”

Institute on Teaching and Mentoring October 2017  
Atlanta, Georgia

## **FELLOWSHIPS:**

Alfred P. Sloan Foundation Minority Ph.D. Program Scholar September 2016 – August 2022

## **EXTRACURRICULAR EXPERIENCE:**

Leader:

- Graduate Women in Physics at UC San Diego (June 2020 – August 2022)

Member:

- Graduate Women in Physics at UC San Diego (October 2017 – June 2020)
- The National Society of Leadership and Success (since August 2015)
- The Society for Collegiate Leadership and Achievement (since August 2015)
- Phi Theta Kappa Honors Society (since 2013)
- Palomar Engineering and Physics Student Organization (January – May 2013)