

# Francisco J. Mercado

fjmercado.github.io

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University of California, Irvine  
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**EDUCATION** UC Irvine – Ph.D. Program 2017 - Projected 2023  
UC Irvine – M.S. Physics Awarded 2019  
Cal Poly Pomona – B.S. Physics Awarded 2017

**PREPRINTS & PUBLICATIONS** A Relationship Between Stellar Metallicity Gradients and Galaxy Age in Dwarf Galaxies  
**F. J. Mercado**, J. Bullock, M. Boylan-Kolchin, and FIRE Collaboration (2020); MNRAS, Volume 501, Issue 4, pp.5121-5134

The time-scales probed by star formation rate indicators for realistic, bursty star formation histories from the FIRE simulations

J. Florez Velázquez, A. Gurvich, C. Faucher-Giguère, J. Bullock, T. Starckenburg, J. Moreno, A. Lazar, **F. J. Mercado**, J. Stern, M. Sparre, C. Hayward, A. Wetzel, K. El-Badry (2020); MNRAS Volume 501, Issue 4, pp.4812-4824

**TALKS/ PRESENTATIONS** Northwestern Science Happy Hour Spring 2021  
GALFRESCA Annual Workshop Summer 2017 - 2019  
UCI SRP Research Symposium Summer 2017  
Cal Poly Pomona SIAM Research Symposium Spring 2017  
229th AAS Meeting Grapevine, Texas Winter 2017  
Cal-Bridge/Campare Symposium, Cal Poly Pomona Summer 2016  
UCI SRP Research Symposium Summer 2016  
GALFRESCA Inaugural Workshop Summer 2016  
Cal Poly Pomona SIAM Research Symposium Spring 2016  
227th AAS Meeting Kisseemee, Florida Winter 2016  
SoCal Conference for Undergrad Research, Harvey Mudd College Fall 2015  
CAMPARE Symposium, Cal Poly Pomona Summer 2015

**HONORS, AWARDS, AND PRIZES** UCI Latino Excellence and Achievement Award Spring 2021  
UCI Physical Sciences Diversity Fellow Spring 2021  
UC Irvine Diversity Recruitment Fellowship Fall 2017  
UC Irvine Competitive Edge Scholar Summer 2017  
UC Irvine SURF Scholar Summer 2016  
Presidents Student Research Travel Scholarship Winter 2016  
Cal-Bridge Scholar 2015-2016  
CAMPARE Scholar Summer 2015  
TELACU Scholar 2013-2017  
Service Learning Award 2013

**PROFES- SIONAL SERVICE** UCI PACE Leadership Team Chair Summer 2020 - Present  
Cal-Brigse Graduate Mentor Fall 2019 - Present

	TELACU Graduate Mentor	Fall 2019 - Present
	UCI Physics Graduate Caucus Diversity Chair	Winter 2018 - Present
	UCI DECADE Physics Graduate Representative	Fall 2018 - Present
	UCI PACE Leader in Training	Fall 2019 - Spring 2020
	Organized GalFRESCA Workshop 2019	Summer 2019
	UCI Physics and Astronomy PACE Mentor	Fall 2018
	UCI STRIDE! Physics and Astronomy Panel Participant	Summer 2018
	UCI Competitive Edge Panel Participant	Summer 2018
<b>COMMUNITY SERVICE</b>	UCI Telescope Outreach Program	Spring 2018 - Present
	UCI WATzUP Group Leader	Fall 2017 - Present
	UCI Eclipse Party Volunteer	Summer 2017
	BUILD Star Party speaker	Spring 2017
	Rivera Middle School Guest Speaker	Spring 2015
	Physics Phun Day Collegewood Elementary	Spring 2015
<b>TEACHING EXPERIENCE</b>	Learning Shack Math and Physics Tutor	Fall 2018 - Present
	Ardent Academy AP Physics C Instructor	Winter 2020
	UC Irvine Graduate Teaching Assistant	Fall 2017 - Winter 2018
	<ul style="list-style-type: none"> <li>• Statistical Mechanics</li> </ul>	Fall 2018
	<ul style="list-style-type: none"> <li>• Life in the Universe</li> </ul>	Spring/Fall 2018
	<ul style="list-style-type: none"> <li>• Introduction to Mathematical Physics</li> </ul>	Fall 2017
	Cal Poly Pomona Learning Assistant	2015-2016
	<ul style="list-style-type: none"> <li>• Electrostatics</li> </ul>	Fall 2015/Winter 2016
	<ul style="list-style-type: none"> <li>• Introductory Physics</li> </ul>	Spring 2015
<b>CERTIFICATIONS</b>	UCI OIE Inclusive Excellence	Fall 2020
	UCI DTEI Certificate in Course Design	Spring 2020
	CIRTL Associate Level	Spring 2020
<b>REFERENCES</b>	Prof. James Bullock	
	<ul style="list-style-type: none"> <li>• Professor at University of California, Irvine</li> <li>• Ph.D. Adviser</li> <li>• Email: bullock@uci.edu</li> </ul>	
	Prof. Jorge Moreno	
	<ul style="list-style-type: none"> <li>• Professor at Pomona College</li> <li>• Mentor</li> <li>• Email: jorge.moreno@pomona.edu</li> </ul>	