

PERSONAL
INFORMATION

Family Name: **Madau**
First Name: **Piero**
Researcher unique identifier: **ORCID 0000-0002-6336-3293**
Nationality: **Italian**

EDUCATION

International School for Advanced Studies, SISSA, Trieste, Italy
Ph.D., Astrophysics, 1987
University of Florence, Florence, Italy
B.S., Physics, 1983

CURRENT POSITIONS

University of California Santa Cruz, Santa Cruz, California, USA
Distinguished Professor of Astronomy and Astrophysics, 2010-
Universita' degli Studi di Milano Bicocca, Italy
Professore Ordinario, Dipartimento di Fisica, 2023-

PREVIOUS POSI-
TIONS

University of California Santa Cruz, Santa Cruz, California, USA
Professor of Astronomy and Astrophysics, 2000-2010
Institute of Astronomy, Cambridge, UK
Assistant Director of Research, 1999-00
Space Telescope Science Institute, Baltimore, Maryland, USA
Astronomer, 1992-99
Johns Hopkins University, Baltimore, Maryland, USA
A. C. Davis Postdoctoral Fellow, 1989-92
California Institute of Technology, Pasadena, California, USA
Postdoctoral Fellow, 1987-89

HONORS AND
AWARDS

2018: Raymond and Beverly Sackler Distinguished Visitor, Institute of Astronomy, Cambridge
2015: Blaise Pascal Chair, École Normale Supérieure, Paris
2015: The Johns Hopkins University Society of Scholars
2014: Dannie Heineman Prize for Astrophysics, American Institute of Physics
2014: Schroedinger Professorship, Pauli Center for Theoretical Physics, ETH Zürich
2005: Humboldt Prize, Alexander von Humboldt Foundation
1995: NASA/Goddard Space Flight Center Group Award
1994: AURA Science Award

EIGHT MOST
IMPORTANT
PUBLICATIONS
(GOOGLE SCHOLAR)

Madau, P., & Dickinson, M. *Cosmic Star-Formation History*. *ARA&A*, 52:415, 2015. [**4469 citations**]
Madau, P., Ferguson, H.C., Dickinson, M. E., et al. *High-redshift Galaxies in the Hubble Deep Field: Colour Selection and Star Formation History to $z \sim 4$* . *MNRAS*, 283:1388, 1996. [**2987 citations**]
Haardt, F., & **Madau, P.** *Radiative Transfer in a Clumpy Universe. II. The Ultraviolet Extragalactic Background*. *ApJ*, 461:20, 1996. [**1995 citations**]
Madau, P., Pozzetti, L., & Dickinson, M. *The Star Formation History of Field Galaxies*. *ApJ*, 498:106, 1998. [**1871 citations**]
Madau, P. *Radiative Transfer in a Clumpy Universe: The Colors of High-Redshift Galaxies*. *ApJ*, 441:18, 1995. [**1862 citations**]
Haardt, F., & **Madau, P.** *Radiative Transfer in a Clumpy Universe. IV. New Synthesis Models of the Cosmic UV/X-Ray Background*. *ApJ*, 746:125, 2012. [**1318 citations**]
Volonteri, M., Haardt, F., & **Madau, P.** *The Assembly and Merging History of Supermassive Black Holes in Hierarchical Models of Galaxy Formation*. *ApJ*, 582:559, 2003. [**1208 citations**]
Madau, P., & Rees, M. J. *Massive Black Holes as Population III Remnants*. *ApJ*, 551:L27, 2001. [**1171 citations**]

REVIEWING ACTIVITIES AND PROFESSIONAL SERVICE	2024: Review Panel, European Research Council 2022: Board of Electors, Professorship of Astrophysics (1909), University of Cambridge, UK 2022: Review Panel, European Research Council 2021: Review Panel, NASA Astrophysics Theory Program (ATP) 2021: External Reviewer, German Gottfried Wilhelm Leibniz Prize 2021: Advisory Board, Center for Astro, Particle and Planetary Physics, NYU Abu Dhabi 2020: Review Panel, European Research Council 2020: Selection Committee, Foundation for Polish Science Prize 2019: Review Panel, Austrian Science Fund (FWF) 2017: Review Panel (chair), ESO membership application, Research Council of Norway 2017: Review Panel, Deutsche Forschungsgemeinschaft Excellence Program 2017: External Review Committee, Department of Astronomy, University of Texas 2017: Review Panel (chair), NASA Astrophysics Theory Program (ATP) 2015: Review Board, Leibniz Institute for Astrophysics Potsdam, Leibniz Association 2015: Review Panel (chair), Cherenkov Telescope Array, Research Council of Norway 2011: Review Panel, Deutsche Forschungsgemeinschaft Excellence Program 2010: Science Prioritization Panel on OIR Astronomy, National Academy of Science 2008: Panel, DOE ASCR Extreme Scale Computing 2007: Review Panel, NASA Spitzer Cycle 5 2006: Review Panel, NASA Hubble Space Telescope Cycle 15 2003: Advisory Board, Kavli Institute for Theoretical Physics, UCSB 2003: Editor, Journal of Cosmology and Astroparticle Physics
SCIENTIFIC SOCIETIES	International Astronomical Union, American Astronomical Society
STUDENTS ADVISED OR CO-ADVISED	Xian Chen, Jiani Ding, Davide Fiacconi, Enrico Garaldi, Eric Gentry, Rudy Gilmore, Javiera Guedes, Francesco Haardt, Michael Kuhlen, Ryan Montgomery, Cristiano Porciani, Lucia Pozzetti, Valery Rashkov, Alberto Sesana, Vivian Tang, Paolo Tozzi, Bruno Villaseñor, Marta Volonteri
POSTDOCS ADVISED	Marie Lau (UCR), Sebastiano Cantalupo (U Milano), Ryan Cooke (Durham), Jürg Diemand (Cisco), Jennifer Lotz (Gemini Observatory), Ben Metcalf (U Bologna), Annalisa Pillepich (MPIA), Sijing Shen (U Oslo), Quinyan Yu (KIAA), Marcel Zemp (D ONE)
LECTURES IN DOCTORAL SCHOOLS	2015: <i>Cosmic Dawn</i> , XX Ciclo de Cursos Especiais, Observatorio Nacional, Rio 2008: <i>Cosmic Evolution of Baryons</i> , National School of Astrophysics, Spineto 2004: <i>The Thermal History of the Universe</i> , INPE Advanced Course, San Paulo 2002: <i>Joint Evolution of Black Holes and Galaxies</i> , School in Gravitational Physics, Como 1998: <i>Global Properties of Galaxies</i> , National School of Astrophysics, Elba Island 1995: <i>Observational Cosmology and Galaxy Evolution</i> , Joint ON-OAC School, Rio
NAMED/KEYNOTE LECTURES	2022: <i>Reionizing the Universe: A Brief History of Baryons and the Cosmic Web</i> , The John Bahcall Lecture in Astrophysics, Tel Aviv University 2021: <i>The Emergence of our Complex Universe</i> , Lectio Magistralis, Inauguration of Academic Year, University of Milano Bicocca 2021: <i>The Dark and Luminous Side of Structure Formation</i> , Quid Ultra? Frontiers and Controversies in Astrophysics, University of Rome 2016: <i>Galaxy Formation and Evolution</i> , Blaise Pascal Lectures, IAP Paris 2014: <i>Cosmic Dawn</i> , Schroedinger Lectures, University of Zürich 2013: <i>The Light and Dark Side of Galaxy Formation</i> , B. Rossi Lectures, Arcetri Observatory 2010: <i>Galactic Substructure: A Glimpse into the Invisible World of Dark Matter</i> , A. Rosenblum Memorial Lecture, Hebrew University, Jerusalem 2004: Bishop Lecture, Columbia University
TEACHING ACTIVITIES (UCSC)	ASTR 113: <i>Introduction to Cosmology</i> , ASTR 230: <i>Diffuse Matter</i> , ASTR 233: <i>Physical Cosmology</i> , ASTR 13: <i>Galaxies, Cosmology, and High Energy Astrophysics</i> , ASTR 240C: <i>Galactic and Extra-galactic Stellar Systems</i> , ASTR 214: <i>Structure Formation in the Universe</i>

MAJOR COLLABORATIONS	International Science Team, NASA Laser Interferometer Space Antenna (<i>LISA</i>), Great Observatories Origins Deep Survey (GOODS), Cosmic Assembly Near-infrared Deep Extragalactic Legacy Survey (CANDELS), Theoretical and Computational Astrophysics Network on Cosmic Reionization (NASA TCAN), WFIRST Extragalactic Potential Observations Science Team (WFIRST-EXPO), <i>Lynx</i> Science & Technology Definition Team
INSTITUTIONAL RESPONSIBILITIES	• 2021–2022: Committee on Academic Personnel (university-wide), Faculty Prize Nomination Committee • 2016–2019: Preliminary Exam Committee, Graduate Admission Committee • 2015: Faculty Search Committee (chair) • 2013: Committee on Privilege and Tenure (university-wide), Graduate Admission Committee • 2012: Committee on Academic Personnel (university-wide) • 2010: Faculty Search Committee (chair), Next Generation Science Institute (director) • 2009: Planning and Budget Committee (university-wide) • 2008: Associate Chair • 2005: UCO/Lick Director Search Committee (university-wide)
RESEARCH INTERESTS	Computational Astrophysics; Dark Matter; Galaxy Formation and Evolution; High Energy Astrophysics; Intergalactic Medium; Reionization; Substructure Lensing; Supermassive Black Holes and Quasars; 21-cm Cosmology
PUBLICATION AND CITATION METRICS	Google Scholar: 391 scientific publications (225 refereed), 57,063 citations, h-index = 108