PERSONAL Fail INFORMATION Fin

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 Study di Milano Bicocca, Italy

Professore Ordinario, Dipartimento di Fisica, 2023-

PREVIOUS POSI-

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 2024: Foreign Member, Lincei National Academy

2018: Raymond and Beverly Sackler Distinguished Visitor, Institute of Astronomy, Cambridge

2015: Blaise Pascal Chair, École Normale Supérieure, Paris2015: 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. [4847 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. [3024 citations]

Haardt, F., & Madau, P. Radiative Transfer in a Clumpy Universe. II. The Ultraviolet Extragalactic Background. ApJ, 461:20, 1996. [2051 citations]

**Madau, P.**, Pozzetti, L., & Dickinson, M. *The Star Formation History of Field Galaxies*. *ApJ*, 498:106, 1998. **[ 1893 citations ]** 

**Madau, P.** Radiative Transfer in a Clumpy Universe: The Colors of High-Redshift Galaxies. ApJ, 441:18, 1995. [1607 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. [1392 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. [1249 citations]

Madau, P., & Rees, M. J. Massive Black Holes as Population III Remnants. ApJ, 551:L27, 2001. [1214 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 Hubble Space Telescope Cycle 15 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
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 Villasenor, 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	<ul> <li>2015: Cosmic Dawn, XX Ciclo de Cursos Especiais, Observatorio National, Rio</li> <li>2008: Cosmic Evolution of Baryons, National School of Astrophysics, Spineto</li> <li>2004: The Thermal History of the Universe, INPE Advanced Course, San Paulo</li> <li>2002: Joint Evolution of Black Holes and Galaxies, School in Gravitational Physics, Como</li> <li>1998: Global Properties of Galaxies, National School of Astrophysics, Elba Island</li> <li>1995: Observational Cosmology and Galaxy Evolution, Joint ON-OAC School, Rio</li> </ul>
NAMED/KEYNOTE LECTURES	<ul> <li>2022: Reionizing the Universe: A Brief History of Baryons and the Cosmic Web,</li></ul>

TEACHING AND UNIMIB)

ASTR 113: Introduction to Cosmology, ASTR 230: Diffuse Matter, ASTR 233: Physical Cosmology, ACTIVITIES (UCSC ASTR 13: Galaxies, Cosmology, and High Energy Astrophysics, ASTR 240C: Galactic and Extragalactic Stellar Systems, ASTR 214: Structure Formation in the Universe, Modern Cosmology and Galaxy Formation

## Major Collaborations

International Science Team, NASA Laser Interferometer Space Antenna (*LISA*), 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), *Lynx* 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: **390 scientific publications** (225 refereed), 59,118 citations, **h-index = 108**