ANDREI MESINGER

Full Professor

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RESEARCH INTERESTS

- First Light and Reionization: The dawn of the first astrophysical structures: What were they? In what numbers? When and how did they reionize and heat the early Universe? How did they interact with their surroundings through feedback processes (radiative, chemical, mechanical)? How can we observe this epoch? How can we learn about cosmology and astrophysics from the 21cm line?
- High-Redshift Sources: What were the properties and abundances of quasars and galaxies? Can we infer these from observations?
- The Nature of Dark Matter: What is it? How can we constrain the properties of Dark Matter using highredshift observations?
- Data Science and Machine Learning: How do we best exploit upcoming large data sets? How do we develop efficient simulators and forward models? How can we obtain unbiased, optimal posteriors using simulation-based interference?

EDUCATION

| LD CEATHOR | | |
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| Ph. D. in Astronomy, Columbia University, With Distinction | η | 2006 |
| M. Phil. in Astronomy, Columbia University | | 2005 |
| M. A. in Astronomy, Columbia University | | 2005 |
| B.S. in Astronomy, Univ. of Maryland at College Park, Cum Laude | | 2002 |
| B.S. in Computer Engineering, Univ. of Maryland at College Park, Magna Cum Laude | | 2002 |
| DOCTORAL THESIS | | |
| Probing Reionization and Early Structure Formation | Advisor: Zoltan Haiman | 2006 |
| HONORS | | |

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| European Research Council (ERC) Consolidator Grant finalist (stage 2: grade A) | 2019 |
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| National Science Habilitation (ASN), rank: full professor | 2017 |
| ERC Starting Grant Award (StG) | 2015 - 2021 |
| ASN, rank: associate professor | 2014 |
| Hubble Prize Fellowship | 2008 - 2011 |
| Doctoral Thesis Distinction | 2006 |
| NASA Graduate Student Research Program (GSRP) Fellowship | 2005 - 2006 |
| Dean's List, UMCP | 1997 - 2002 |
| Banneker/Key Scholarship, UMCP | 1997 - 2001 |
| Maryland Distinguished Scholar | 1997 - 2001 |
| National Merit Finalist Award | 1997 - 2001 |

RESEARCH

| FULL PROFESSOR, University of Catania (UniCT), Catania | 2025 – |
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| ASSOCIATE PROFESSOR, Scuola Normale Superiore (SNS), Pisa | 2020 - 2025 |
| SENIOR RESEARCH PROFESSOR (RTD-B; chiamata diretta ERC StG), SNS, Pisa | 2017 - 2020 |
| JUNIOR RESEARCH PROFESSOR (JRP), SNS, Pisa | 2011 - 2017 |
| HUBBLE FELLOW, Department of Astrophysical Sciences, Princeton Univ. | 2008 - 2011 |
| POSTDOCTORAL FELLOW, Physics Department, Yale Univ. and UCLA | 2006 - 2008 |
| GRADUATE RESEARCH FELLOW, Astronomy Department, Columbia Univ. | 2002 - 2006 |
| RESEARCH ASSISTANT, Small Bodies Node, Astronomy Department, UMCP | 2001 - 2002 |

TEACHING

| PROFESSOR, "Computational Astrophysics", 50h, UniCT - masters level course on modern cosmological simulations and inference | 2025 - 2026 |
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| PROFESSOR, "Astrostatistics", 20h, SNS - masters and graduate level course on Bayesian statistics, inference, and machine learning | 2022 - 2025 |
| PROFESSOR, "Structure Formation in the Early Universe", 40h, SNS - graduate level course on the first galaxies and IGM structures | 2011 - 2025 |
| PROFESSOR, "Frontiers of Cosmology", 40h, SNS - masters and graduate level seminar course on the latest advances in cosmology | 2015 - 2022 |
| INVITED LECTURER, "International School on Physics of the Universe – Multi-Messenger Astronomical Observatory in Asiago - series of invited lectures on 21-cm cosmology for a winter school for graduate students | ophysics", 2020 |
| INVITED LECTURER, "Cosmological Applications from First Stars, Reionization and 21-cm Ob Univ. of Barcelona - series of invited lectures on reionization and the IGM for a summer school for graduate students | 2018 |
| TEACHER, "Astronomy Lab 101", Astronomy Department, Columbia Univ undergraduate astronomy course for non-majors (independently designed and taught) | 2003 – 2005 |
| TEACHING ASSISTANT, "Cosmology", Astronomy Department, Columbia Univ graduate course in cosmology (designed and graded problem sets) | 2004 |
| PUBLIC OBSERVING VOLUNTEER, Rutherford Observatory, Columbia Univ public observing events (independently designed and taught) | 2005 |
| NSTITUTIONAL SERVICE | |
| Faculty representative in the Electoral Commission, SNS | 2024 |
| Faculty committee member for the Computational Astrophysics and Cosmology graduate program | , SNS 2023 - |
| Physics faculty representative at the SNS University Forum (Conferenza di Ateneo) | 2023 - 2025 |
| Department of Excellence Steering Committee member, SNS | 2023 - 2025 |
| International forum member, SNS | 2022 - 2025 |
| Supplementary SNS representative for the Italian Computing and Data Infrastructure commission | 2022 - 2025 |
| Supplementary commission member for the Ethics Committee, SNS | 2022 - 2025 |
| Commission member for evaluating institutional research sites, SNS | 2021 - 2022 |
| Steering committee member for the High-Performance Computing (HPC) center, SNS | 2020 - 2025 |
| Commission member for the "European Universities (Erastmus+)" working group, SNS | 2020 |
| Physics commission member for the SNS undergraduate and Masters admissions exams | 2018, 2019 |
| Commission member for the "Department of Excellence" GPU cluster specifications design, SNS | 2019 |
| Technical commission member for the "Department of Excellence" PB storage, SNS | 2019 |
| Thesis defense commission member | 2013 – |
| Postdoctoral fellowship award commission member | 2013 – |
| Founder and organizer of the Cosmology Journal Club | 2011 – 2022 |
| Founder and organizer of the <i>Reionization arXiv discussion group</i> | 2017 – |
| Founder and organizer of the Machine Learning arXiv discussion group | 2019 – |
| Student supervisor (relatore della tesi) Yilong Zhang, PhD, SNS Nikolaus Triantafyllou, PhD, SNS Samuel Gorgnon-Hartman, PhD, SNS Daniela Breitman, PhD, SNS Ivan Nikolić, PhD, SNS David Prelogović, PhD, SNS, with honors | 2023 - 2023 - 2022 - 2021 - 2020 - 2019 - 2024 |

| Harman Kaur, <i>PhD</i> , <i>SNS</i> Aaron Ewall-Wice, <i>PhD</i> , <i>MIT</i> (co-supervisor with Prof. J. Hewitt) Emanuele Sobacchi, <i>PhD</i> , <i>SNS</i> , <i>with honors</i> Fabio Pacucci, <i>PhD</i> , <i>SNS</i> , <i>with honors</i> (co-supervisor with Prof. A. Ferrara) Joshua Schroeder, <i>PhD</i> , <i>Columbia Univ.</i> (co-supervisor with Prof. Z. Haiman) Emanuele Sobacchi, <i>Masters (Laurea magistrale)</i> , <i>Uni. Pisa</i> and <i>SNS</i> Keri Dixon, <i>PhD</i> , <i>UCLA</i> (co-supervisor with Prof. S. Furlanetto) Daniela Crociani, <i>PhD</i> , <i>Bologna Univ.</i> (co-supervisor with Prof. L. Moscardini) | 2017 - 2021 $2011 - 2017$ $2012 - 2015$ $2012 - 2015$ $2007 - 2014$ $2011 - 2012$ $2009 - 2012$ $2008 - 2012$ |
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| Postdoctoral supervisor, SNS Dr. Jordan Flitter Dr. Junsong Cang Dr. Steven Murray, Marie Curie Fellow Dr. James Davies Dr. Bella Nasirudin Dr. Yuxiang Qin Dr. Caroline Heneka Dr. Nicolas Gillet Dr. Jaehong Park Dr. Bradley Greig | 2024 - 2024 - 2023 - 2025 $2021 - 2025$ $2020 - 2024$ $2018 - 2021$ $2018 - 2019$ $2016 - 2019$ $2016 - 2020$ $2013 - 2017$ |
| OTHER PROFESSIONAL ACTIVITIES | |
| EXECUTIVE BOARD MEMBER Hydrogen Epoch of Reionization Array (HERA) Executive Board SKA Epoch of Reionization and Cosmic Dawn Science Team Board | 2015 – 2015 – |
| WORKING GROUP CHAIR SKA Reionization and Cosmic Dawn Science Working Group (SWG) | 2019 – 2024 |
| WORKING GROUP MEMBER Italian SKA Science Group MOSAIC ELT SWG1 – First Light Galaxies and the Reionization of the Universe Advanced Telescope for High Energy Astrophysics (ATHENA) SWG3 - Observatory SKA Reionization and Cosmic Dawn SWG | 2021 - 2021 - 2016 - 2013 - |
| GRANT PANELIST Fundação para a Ciencia e a Tecnologia (FCT), Individual Support, <i>Physics Panel</i> National Science Foundation (NSF), <i>Cosmology Simulations Panel</i> FCT, Exact Sciences and Engineering Grants, <i>Physics Panel</i> NSF, <i>Cosmology Panel</i> | 2018, 2019, 2020, 2022 2013 2012 2011 |
| EXPERT REVIEWER for funding schemes Australian Research Council, l'Agence Nationale de la Recherche, NSF, Partnership to Computing in Europe, Croatian Science Foundation, Netherlands Organization for Sc Swiss National Science Foundation, MIUR, ERC, Sao Paulo Research Foundation, Is Foundation | cientific Research, |
| EDITORIAL BOARD MEMBER, Journal of Astrophysics, Hindawi Pub. Corp. | 2013 - 2017 |
| MEMBER of Lunar University Network for Astrophysics Research (LUNAR) | 2009 - 2013 |
| JOURNAL REFEREE Science, Nature Astronomy, Astronomy and Astrophysics, Monthly Notices of the Royal Astronomical Society, Journal of Cosmology and Astroparticle Physics, Machine learning: Science and Technology, Publications of the Astronomical Society of the Pacific, Astrophysical Journal, ApJ Letters, Physical Review Letters | |
| DESIGNER and CREATOR of DexM and 21cmFAST (http://homepage.sns.it/mesinger public, semi-numerical codes simulating the early Universe; used by researchers in over the control of the cont | |
| SCIENTIFIC ORGANISING COMMITTEES Role: Member; Title: The Fifth National Workshop on the SKA Project (Bologna, Italian Role: Chair; Title: Understanding the Epoch of Reionization II (Sesto CfA, Italy) Role: Member; Title: The SKA Epoch of Reionization Working Group meeting (Beijin Role: Member; Title: The Fourth National Workshop on the SKA Project (Catania, Italian) | 2025 ng, China) 2024 |

| Role: Chair; Title: Understanding the Epoch of Reionization (Sesto CfA, Italy) | 2023 |
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| Role: Chair; Title: The SKA Epoch of Reionization Working Group meeting (Pisa, Italy) | 2022 |
| Role: Member; Title: Learning the High Redshift Universe (remote conference; SAZARAC SIP) | 2022 |
| Role: Member; Title: The Precursor View of the SKA Sky (SKAO, remote conference) | 2021 |
| Role: Chair; Title: Next-Gen. Cosmology with Next-Gen. Radio Telescopes II (Sesto CfA, Italy) | 2020 |
| Role: Chair; Title: International 21cmFAST development workshop (Pisa, Italy) | 2019 |
| Role: Chair; Title: Next-Gen. Cosmology with Next-Gen. Radio Telescopes (Sesto CfA, Italy) | 2018 |
| Role: Chair; Title: The SKA Epoch of Reionization Working Group meeting (Pisa, Italy) | 2017 |
| Role: Chair; Title: The Dawn of Galaxies (Obergurgl Research Conference Series, Austria) | 2017 |
| Role: Co-Chair; Title: HI 21cm Cosmology (Kavli Workshop, UK) | 2016 |
| Role: Co-Chair; Title: Physics of Reionization and the Cosmic Dawn in the SKA Era (Sesto CfA, Italy) | 2016 |
| Role: Member; Title: Cosmological Structures from Reionization to Galaxies (ICTP, Trieste, Italy) | 2015 |
| Role: Member; Title: European Week of Astronomy and Space Sciences (Rome, Italy) | 2012 |

INVITED TALKS / REVIEWS

- "Multi-tracer modeling with the new 21cmFASTv4", invited talk, 21cm Cosmology Workshop, Xi'an, China (2025)
- "Multi-tracer forward-modeling the first billion years", invited talk, *Mining the Rainbow: Cosmology in Multicolour via Line Intensity Mapping Surveys*, IPFU Trieste, Italy (2025)
- "Forward-modeling multi-tracer observations of the first billion years with 21cmFASTv4", invited talk, *Cosmology on Safari*, Hluhluwe KwaZulu-Natal, South Africa (2025)
- "Forward-modeling the first billion years with 21cmFASTv4", invited talk, *Radio Cosmology and Continuum Observations in the SKA Era: A Synergic View*, ICTS Bengaluru, India (2025)
- "Towards the 21cm revolution", invited review, Cosmology with the SKA, IIT Indore, India (2025)
- "The importance of scatter in determining galaxy emissivity and reionization morphology", invited talk, *The growth of galaxies in the early Universe X*, Sesto, Italy (2025)
- "Percent-level constraints on the timing of reionization from XQR30+ Ly α forest", invited talk, Understanding the Epoch of Reionization II, Sesto, Italy (2025)
- "21cm synergies during the epoch of reionization", invited talk, *The multi-color Universe A new era with Line Intensity Mapping*, Heidelberg, Germany (2024)
- "What does the EDGES detection really mean for physical models of the cosmic 21cm signal?", invited talk, 7th Global 21-cm Workshop 2024, RRI, Bengaluru, India (2024)
- "HI signal forecasts and simulations", invited review, 21cm Cosmology Workshop, Hangzhou, China (2024)
- "Extracting cosmological information from the 21cm line", invited talk, *SynCRETism symposium*, Crete, Greece (2024)
- "Self-consistent inference of reionization and galaxy properties from XQR-30 Ly α forest data", invited talk, Linking galaxy physics from ISM to IGM scales II, Sesto, Italy (2024)
- "Inference of cosmic HII bubbles around groups of galaxies during reionization", invited talk, *The growth of galaxies in the early Universe IX*, Sesto, Italy (2024)
- "Status and future of 21cm cosmology during the first billion years", invited review, *East Asia SKA Workshop*, Jeju Island, South Korea (2023)
- "Status and future of 21cm cosmology", invited review, 21-cm Cosmology and Dark Matter, IFPU, Trieste, Italy (2023)
- "Interpretation of the redshifted 21-cm measurements", invited talk, *Neutral Hydrogen as a Cosmological Probe Across Cosmic Time*, Nazareth, Israel (2023)
- "Inferring reionization and galaxy scaling relations from IGM observations", invited talk, *The growth of galaxies in the early Universe VIII*, Sesto, Italy (2023)
- "Synergies with the Square Kilometre Array for exploring the Epoch of Reionization and Cosmology", invited talk, *Coordinated Surveys of the Southern Sky*, ESO Garching, Germany (2023)
- "Cosmic Dawn and Reionization: what we know now and what more can we learn", invited review, *Theory meeting experiment: particle astrophysics and cosmology, 19th Recontres du Vietnam*, Quy Nhon, Vietnam (2023)

- "Cosmology with the 21cm line", invited review, *New Physics from Galaxy Clustering*, CERN, Switzerland (2022)
- "Charting the first billion years of our Universe with the Square Kilometer Array", invited review, *IAA Severo Ochoa Colloquium Series and Workshop*", Granada, Spain (2022)
- "Learning about unseen galaxies from 21-cm", invited talk, *Linking galaxy physics from ISM to IGM scales*, Sesto, Italy (2022)
- "Reionization completed at 5.0<z<5.6", invited talk, *The growth of galaxies in the early Universe: shaping the JWST strategy*, Sesto, Italy (2022)
- "Learning about the first billion years with the HERA telescope", invited review, *Meeting of the Royal Astronomical Society*, online (2021)
- "Deciphering redshifted 21-cm signals from the Cosmic Dawn", interview featured in *PRACE Digest 2021*, https://prace-ri.eu/wp-content/uploads/PRACE Digest 2021.pdf (2021)
- "Reionization theory and 21-cm cosmology", invited lecture series, *International School on Physics of the Universe Multi-Messenger Astrophysics*, Asiago, Italy (2020)
- "Cosmic Reionization of Hydrogen", invited review, *Barefoot EoR: The first billion years of the Universe*, Queensland, Australia (2019)
- "Learning about the first galaxies from the cosmic 21-cm signal", invited talk, *Lines in the Large Scale Structure*, Marseille, France (2019)
- "The Epoch of Reionization: ongoing activities towards the SKA", invited talk, *The Second National Workshop of SKA Science and Technology*, Bologna, Italy (2018)
- "Modeling Reionization Observables", invited review, *IGM2018: Revealing Cosmology and Reionization History with the Intergalactic Medium*, IPMU Kashiwa, Japan (2018)
- "Reionization theory and simulations / IGM recombinations / 21-cm cosmology", invited lecture series, Cosmological Applications from First Stars, Reionization and 21-cm Observations, Barcelona, Spain (2018)
- "The Cosmic Dawn and Epoch of Reionization: Theory and Simulations", invited review, *Peering towards Cosmic Dawn, IAU Symposium 333*, Dubrovnik, Croatia (2017)
- "Illuminating the Cosmic Dawn", invited talk, 13th Conference of the Hellenic Astronomical Society, Heraklion, Greece (2017)
- "SKA Epoch of Reionization and Cosmic Dawn Key Science Project Summary", invited review, *Science for the SKA Generation*, Goa, India (2016)
- "EoR/CD parameter estimation from the cosmic 21-cm signal", invited talk, *HI 21cm Cosmology*, Cambridge, UK (2016)
- "Cosmic Dawn and Reionization from Next Generation Interferometers", invited talk, *Cosmology with Next Generation Radio Surveys*, ICTP, Trieste, Italy (2016)
- "Studying the first X-ray sources in our Universe with the redshifted 21-cm line", invited talk, *Feedback from accreting binaries in cosmological scales*, AAS HEAD meeting, Naples, USA (2016)
- "Lyman alpha emitting galaxies as a probe of reionization", invited talk, *Cosmology and First Light*, IAP, Paris, France (2015)
- "State of the art in 21-cm theory and simulations", invited review, *Preparing for the 21-cm revolution*, UCI, Irvine, USA (2015)
- "Semi-numerical models of Reionization and the Cosmic Dawn", invited review, *Cosmological Structures from Reionization to Galaxies*, ICTP, Trieste, Italy (2015)
- "Modeling Reionization and the Cosmic Dawn", invited talk, *Cosmology from Baryons at High-Redshift*, ICTP, Trieste, Italy (2014)
- "Constraining Cosmic Dawn and Reionization Physics with HI Data", invited talk, *Advancing Astrophysics with the Square Kilometre Array*, Giardini Naxos, Italy (2014)
- "The imprint of Warm Dark Matter on the cosmological 21cm line", invited lecturer, *Chalonge Meudon Workshop*, Paris at Meudon, France (2014)
- "The imprint of inhomogeneous reionization on the Lyman alpha line", invited talk, *Lyman Alpha as an Astrophysical Tool*, Stockholm, Sweden (2013)

- "The Dark Ages and Reionization", invited lecturer, Petnica School of Cosmology, Petnica, Serbia (2013)
- "What can the kinetic Sunyaev-Zel'dovich signal tell us about reionization", invited talk, *Reionization in the Red Center*, Uluru, Australia (2013)
- "Reionization: a theoretical perspective", invited review talk, *Cosmic Reionization: Updating Physical Scenarios*, Rome, Italy (2012)
- "Enabling parameter space exploration of the 21cm signal: next generation tools for the early Universe", invited talk, *First National Meeting on Science and Technology with SKA*, Rome, Italy (2012)
- "Illuminating the early Universe with the 21cm line", invited review, *LUNAR lecture series*, http://lunar.colorado.edu/webinar/mesinger_details.php (2010)

PEER-REVIEWED GRANTS/PROJECTS

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| MUR PRIN, "Optimal inference from radio images of the epoch of reionization" role: PI/national coordinator; amount: 217.415 euros | 2023 – 2026 |
| PRACE EuroHPC, "Forward modeling the first billion years" role: PI; amount: 10.000.000 core hours | 2022 – 2024 |
| MUR PRO3, "Data Science methods for Multi-Messenger Astrophysics and Cosmology" role: co-PI; amount: 232.500 euros | 2022 – 2023 |
| PRACE Tier-0, "Artificial intelligence for 21cm cosmology (Alfor21CM)" role: PI; amount: 20.000.000 core hours | 2019 – 2020 |
| Chandra TAC, "A local characterization of the z~10 X-ray field and its effects on the IGM" role: co-I; PI: Prof. Bret Lehmer; amount: 509ks, Chandra cycle 21 | 2020 – 2021 |
| ESO, "XQR-30: the ultimate XSHOOTER legacy survey of quasars at $z \simeq 5.8 - 6.6$ " role: co-I; PI: Dr. Valentina D'Odorico; amount: 248h, XSHOOTER | 2019 – 2020 |
| NVIDIA GPU Grant Program, "AI for 21CM" role: PI; amount: Titan V GPU | 2018 |
| NSF, "HERA: Unveiling the Cosmic Dawn" role: co-I; PI: Prof. Aaron Parsons; amount: US\$ 7.173.107 | 2018 – 2023 |
| PRACE Tier-0, "Galaxy Formation For the Epoch of Reionization (GAFFER)" role: PI; amount: 30.000.000 core hours | 2017 – 2018 |
| NASA, "The ionizing photon budget and the decline of Lyman-a emission in z>6 dropouts" role: co-I; PI: Dr. Anson D'Aloisio; amount: US\$ 159.915 | 2017 – 2018 |
| ESO, "Piercing through the reionization era with high-quality spectra of 4 quasars at z~6.5" role: co-I; PI: Dr. Valentina D'Odorico; amount: 35h, XSHOOTER | 2017 – 2018 |
| NSF, "Illuminating our Early Universe with HERA, the Hydrogen Epoch of Reionization Array" role: co-I; PI: Prof. Aaron Parsons; amount: US\$ 9.900.000 | 2016 – 2020 |
| ERC StG, "An Illumination of the Dark Ages: modeling reionization & interpreting observations" role: PI; amount: 1.468.750 euros | 2015 – 2021 |
| MIUR-SNS-fondi di Ateneo, "Next Generation Simulations of Reionization and the Cosmic Dawn role: PI; amount: 70.000 euros | "2014 – 2016 |
| NSF, "Hydrogen Epoch of Reionization Arrays (HERA): Illuminating our Early Universe" role: collaborator; PI: Prof. Aaron Parsons; amount: US\$ 2.144.113 | 2014 – 2016 |
| NSF, "Modeling the Reionization of the Intergalactic Medium" role: collaborator; PI: Prof. Scott Anderson; amount: US\$ 374.140 | 2013 – 2016 |
| MWA TAC "Constraining Xray and Dark Matter Heating Before the Epoch of Reionization" role: co-PI; amount: 16.2 hours | 2013 – 2014 |
| MIUR-SNS-fondi di Ateneo, "Interpreting the Cosmological 21cm Signal" role: PI; amount: 24.000 euros | 2013 – 2014 |
| CINECA, "Statistics of High-Redshift Lyman Alpha Emitters" (LAE-STAT) role: PI; amount: 400.000 CPU hours | 2012 – 2013 |

| NASA, "The convergence of Lya forest simulations and the response of cosmic gas to reionization role: co-I; PI: Dr. Matthew McQuinn; amount: 400.000 CPU hours | 1"2012 – 2013 |
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| MIUR-SNS-fondi di Ateneo, "Illuminating Reionization with Quasars" role: PI; amount: 34.000 euros | 2012 – 2013 |
| ERC REGPOT, "BELISSIMA" role: collaborator; PI: Dr. Srdjan Samurovic; amount: 1.298.427 euros | 2010 – 2013 |
| NASA Lunar Science Institute, "LUNAR: Exploring the Cosmos from the Moon" role: collaborator; PI: Dr. Jack Burns; amount: ~US\$ 6.500.000 | 2009 – 2013 |
| NASA Hubble Fellowship, "Simulating Reionization" role: PI; amount: US\$ 363.831 | 2008 – 2011 |
| NASA GSRP Fellowship, "Probing Reionization History" role: PI; advisors: Prof. Z. Haiman & Dr. J. Mather; amount: ~US\$ 60.000/yr (renewable for 3y) | 2005 – 2006 ers) |

PEER-REVIEWED PUBLICATION SUMMARY (last updated Aug 2025)

>200 peer-reviewed publications since 2004

>13k citations; >3.4k citations normalized by author number; (source: NASA ADS Database) h-index of 69; i10 index of 160; i100 index (>100 citations) of 43 (source: NASA ADS Database)

BOOKS

"Understanding the Epoch of Cosmic Reionization: Challenges and Progress", Astrophysics and Space Science Library, Springer Publishing, (2016) ISBN 978-3-319-21957-8

See full publication list on the NASA ADS Database:

https://ui.adsabs.harvard.edu/public-libraries/WxzZvhZURnmDsBui15u5pg

n.b. last updated October 2025

[&]quot;The Cosmic 21-cm Revolution: charting the first billion years of our Universe", Institute of Physics (IOP) publishing (2019) ISBN 9780750322348