

UNIVERSITÀ DEGLI STUDI DI MILANO

Procedura di selezione per la chiamata a professore di I fascia da ricoprire ai sensi dell'art. 18, comma 1, della Legge n. 240/2010 per il settore concorsuale 02/C1 - ASTRONOMIA, ASTROFISICA, FISICA DELLA TERRA E DEI PIANETI,
(settore scientifico-disciplinare FIS/05 - ASTRONOMIA E ASTROFISICA)
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Claudio Grillo CURRICULUM VITAE

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	GRILLO
NOME	CLAUDIO
DATA DI NASCITA	6 NOVEMBRE 1980

TITOLI

TITOLO DI STUDIO

(indicare la Laurea conseguita inserendo titolo, Ateneo, data di conseguimento, ecc.)

2004 Degree in Physics from the University of Milan (UniMi) (marks: 110/110 *cum laude*),
Gravitational Lensing in Clusters of Galaxies (advisers G. Bertin and M. Lombardi)

**TITOLO DI DOTTORE DI RICERCA O EQUIVALENTI, OVVERO, PER I SETTORI INTERESSATI, DEL DIPLOMA
DI SPECIALIZZAZIONE MEDICA O EQUIVALENTE, CONSEGUITO IN ITALIA O ALL'ESTERO**
(inserire titolo, ente, data di conseguimento, ecc.)

2008 PhD in Physics, Astrophysics, and Applied Physics from the UniMi, *Elliptical Galaxies as Strong Gravitational Lenses* (advisers G. Bertin and M. Lombardi)

ALTRI TITOLI CONSEGUITSI

(inserire titolo, ente, data di conseguimento, ecc.)

• CURRENT POSITION

2019 – Associate Professor, Physics Department – UniMi, Italy

• PREVIOUS POSITIONS

2016 – 2021 Affiliated Associate Professor in Cosmology, Niels Bohr Institute (NBI), University of Copenhagen (KU), Denmark

2016 – 2019 Assistant Professor (three-year tenure track) – Programme “Rita Levi Montalcini”, Physics Department, UniMi, Italy

2015 – 2016 Associate Professor at the Centre of Excellence “Dark Cosmology Centre”, NBI, KU, Denmark

2012 – 2015 Research Fellow at the Centre of Excellence “Dark Cosmology Centre”, NBI, KU, Denmark

2010 – 2012 Research Fellow at the Cluster of Excellence for Fundamental Physics “Origin and Structure of the Universe”, Garching, Germany

2008 – 2010 Post-doc at the Max-Planck Institut fuer extraterrestrische Physik, Garching, Germany

• SCIENTIFIC VISITS & TRAVELS

2005 – Participation in more than 60 international scientific conferences, workshops and PhD schools, with invited and contributed oral presentations and posters

2004 – 2008 ESO (Garching, Germany): several visits (total 25 months)

2006 Kavli Institute for Theoretical Physics (Santa Barbara, California, USA): 1 month visit

• FOREIGN LANGUAGES

Italian: mother tongue; English: C1/C2. “Certificate in English Language Teaching to Adults (CELTA)”, University of Cambridge; German: B1/B2; Danish: A2

ATTIVITÀ DIDATTICA

INSEGNAMENTI E MODULI

(inserire periodo [gg/mm/aa inizio e fine], anno accademico, corso laurea, numero di ore frontali, eventuale CFU)

At the UniMi:

- (2022) – Lecturer – *Introduction to Astrophysics* (BSc)
2022 – Lecturer – *Extragalactic astrophysics* (MSc)
2020 – Lecturer – *Thermodynamics* (BSc)
2018 – 2022 Lecturer – *Astronomy laboratory* (BSc)
2017 – 2021 Lecturer – *Advanced topics in astrophysics and plasma physics - Gravitational lensing* (PhD) and *General Physics* (BSc)
2005 – 2006 Teaching Assistant – *General Physics* (BSc)
- At the KU:
- 2015 Lecturer – *Classic astrophysical papers* (MSc and PhD)
2012 – 2015 Invited Lecturer – *Cosmology* (BSc) on “Gravitational lensing and dark matter”
- And,
- 2012 English Teacher to Adults (level B1), Muenchner Volkshochschule, Munich, Germany
2011 Lecturer – *Hands-on Strong Gravitational Lensing School* (PhD School), Cluster of Excellence “Origin and Structure of the Universe”, Garching, Germany
2010 Invited Lecturer – PhD School “Francesco Lucchin”, Madonna di Campiglio, Italy

ATTIVITÀ DI DIDATTICA INTEGRATIVA E DI SERVIZIO AGLI STUDENTI

ATTIVITÀ DI RELATORE DI ELABORATI DI LAUREA, DI TESI DI LAUREA MAGISTRALE, DI TESI DI DOTTORATO E DI TESI DI SPECIALIZZAZIONE

(inserire numero, anno accademico, ateneo, corso laurea, ecc.)

At the UniMi:

- 2018 – Main supervisor of postdocs (A. Acebron, ongoing; P. Bergamini, ongoing; S. Schuldt, starting in fall 2022), PhD (G. Granata, ongoing), MSc (M. Della Torre; C. De Paoli; G. Granata; A. Bolamperti; G. Ferrami; F. Scagliotti, ongoing; M. Macchini, ongoing), and BSc (A. Bolamperti; M. Robbiati; M. Zanoni; G. Ferrami; M. Beltrame; D. Abriola; J. Masnaghetti; F. Leveraro; M. Corioni; M. Picciolini) students
2016 – Co-supervisor of PhD (U. Rescigno; A. Bolamperti, ongoing; G. Riva, ongoing), MSc (S. Torniamenti; S. Garofalo; L. Stefanelli; G. Riva; M. Zanoni, ongoing; I. Veronesi, ongoing; D. Abriola, ongoing; D. Della Pergola, ongoing), and BSc (M. Burghesu; C. De Paoli; G. Granata; R. Malandrino; C. Minarini; M. Schulz; M. Messa; M. Di Mario; L. Camillini; R. Natale; D. Tornotti; E. Baraldi; A. Fumagalli) students

At the KU:

- 2014 – 2018 Main supervisor of postdocs (M. Bonamigo; E. Munari), MSc (W. G. Parry; M. F. Hansen), and undergrad (P. Gandhi from Yale for a summer project) students

ATTIVITÀ DI TUTORATO DEGLI STUDENTI DI CORSI DI LAUREA E DI LAUREA MAGISTRALE E DI TUTORATO DI DOTTORANDI DI RICERCA

(inserire anno accademico, corso laurea, ecc.)

At the UniMi:

- 2018 – Main supervisor of postdocs (A. Acebron, ongoing; P. Bergamini, ongoing; S. Schuldt, starting in fall 2022), PhD (G. Granata, ongoing), MSc (M. Della Torre; C. De Paoli; G. Granata; A. Bolamperti; G. Ferrami; F. Scagliotti, ongoing; M. Macchini, ongoing), and BSc (A. Bolamperti; M. Robbiati; M. Zanoni; G. Ferrami; M. Beltrame; D. Abriola; J. Masnaghetti; F. Leveraro; M. Corioni; M. Picciolini) students
2016 – Co-supervisor of PhD (U. Rescigno; A. Bolamperti, ongoing; G. Riva, ongoing), MSc (S. Torniamenti; S. Garofalo; L. Stefanelli; G. Riva; M. Zanoni, ongoing; I. Veronesi, ongoing; D. Abriola, ongoing; D. Della Pergola, ongoing), and BSc (M. Burghesu; C. De Paoli; G. Granata;

R. Malandrino; C. Minarini; M. Schulz; M. Messa; M. Di Mario; L. Camillini; R. Natale; D. Tornotti; E. Baraldi; A. Fumagalli) students

At the KU:

2014 – 2018 Main supervisor of postdocs (M. Bonamigo; E. Munari), MSc (W. G. Parry; M. F. Hansen), and undergrad (P. Gandhi from Yale for a summer project) students

SEMINARI

(inserire titolo del seminario, luogo, data, ecc.)

• PUBLIC OUTREACH

- 2021 *PhD Welcome Day: some thoughts from an academic perspective*, UniMi PhD Welcome Day
2020 *Nuovi indizi sulla materia oscura*, UniMi announcement
2018 *Using Supernova Refsdal to Measure the Hubble Constant*, AAS Nova Research highlights;
Icarus, la stella più lontana mai osservata, UniMi announcement
2018 Supervision of D. Errico (high-school student) during a two-week, full-time internship
2017 *Once-in-a-lifetime event*, paper in the Italian Physical Society journal, Il Nuovo Saggiatore (2017, Vol. 33, No. 1-2); *Scoperta una misteriosa galassia a disco nell'Universo giovane*, UniMi announcement
2015 *MUSE Observations Enable Prediction of Once-in-a-lifetime Supernova Replay*, ESO announcement (ann15088); *Kosmiske forstørrelsesglas*, KVANT journal

ATTIVITÀ DI RICERCA SCIENTIFICA

PUBBLICAZIONI SCIENTIFICHE

(per ciascuna pubblicazione indicare: nomi degli autori, titolo completo, casa editrice, data e luogo di pubblicazione, codice ISBN, ISSN, DOI o altro equivalente)

• ABSTRACT

Claudio Grillo is an observational astrophysicist, studying mainly massive galaxies and galaxy clusters and the dark components in the Universe. He has actively participated in large HST and VLT programmes and has been awarded more than 800 hours of observing time (both as PI and CoI). He has coordinated the different phases of data acquisition, reduction and analysis and (co-)supervised BSc, MSc and PhD students, and postdocs within the international collaborations. Since 2015, he has been leading a small research group. He has pioneered the combination of strong lensing and stellar population analyses in massive lens early-type galaxies and provided observational evidence in favour of a) a main stellar population origin for the tilt of the Fundamental Plane, b) a Salpeter stellar Initial Mass Function, and c) a significant contraction of the cosmologically predicted dark-matter haloes. Furthermore, he has shown how to complement the measurements of strong lensing and stellar dynamics to estimate the values of the cosmological matter and dark-energy density parameters. By combining strong lensing analyses and cosmological simulations, he has found a statistically significant difference in the number and spatial distribution of observed and simulated massive subhaloes in the cores of galaxy clusters. In a blind test, he has successfully predicted the position, time, and brightness of the reappearance of the first strongly lensed and spatially resolved, core-collapse supernova. He has recently exploited precise cluster mass reconstructions to estimate the values of the Hubble parameter and those of the cosmological matter and dark-energy density parameters. He is participating in several projects on galaxies and clusters which will make use of JWST, Euclid and LSST data.

• HIGHLIGHTS

From SAO/NASA ADS (as of 09/2022):

Academic age (i.e., years of research activity since first peer-reviewed publication): 14.7

Total number of refereed publications: 116 (of which 16 as first - 2 as single - and 12 as second author)

2 publications in Nature + 2 publications in Nature Astronomy + 1 publication in Science

Total number of citations: 5942 – H-index = 45

Number of citations as first author: 634 – H-index as first author: 12

- **PUBLICATION LIST (only refereed, published or accepted and in press, papers):**
ORCID 0000-0002-5926-7143, Research ID E-6223-2015

1. **Grillo, C.**, Gobat, R., Rosati, P., and Lombardi, M. 2008: “*Stellar mass estimates in early-type galaxies from lensing+dynamical and photometric measurements*”, A&A, 477, 25.
(<https://arxiv.org/abs/0712.0680>)
2. **Grillo, C.**, Lombardi, M., and Bertin, G. 2008: “*Cosmological parameters from strong gravitational lensing and stellar dynamics in elliptical galaxies*”, A&A, 477, 397.
(<https://arxiv.org/abs/0711.0882>)
3. **Grillo, C.**, Lombardi, M., Rosati, P., Bertin, G., Gobat, R., Demarco, R., Lidman, C., Motta, V., and Nonino, M. 2008: “*A twelve-image gravitational lens system in the $z \sim 0.84$ cluster Cl J0152.7-1357*”, A&A, 486, 45.
(<https://arxiv.org/abs/0805.2381>)
4. **Grillo, C.**, Gobat, R., Lombardi, M., and Rosati, P. 2009: “*Photometric mass and mass decomposition in early-type lens galaxies*”, A&A, 501, 461.
(<https://arxiv.org/abs/0904.3282>)
5. **Grillo, C.**, Eichner, T., Seitz, S., Bender, R., Lombardi, M., Gobat, R., and Bauer, A. 2010: “*Golden gravitational lensing systems from the Sloan Lens ACS Survey. I. SDSS J1538+5817: one lens for two sources*”, ApJ, 710, 372.
(<https://arxiv.org/abs/0912.0744>)
6. **Grillo, C.** and Gobat, R. 2010: “*On the Initial Mass Function and tilt of the Fundamental Plane of massive early-type galaxies*”, MNRAS, 402, 67.
(<https://arxiv.org/abs/0912.4051>)
7. **Grillo, C.** 2010: “*Projected Central Dark Matter Fractions and Densities in Massive Early-type Galaxies from the Sloan Digital Sky Survey*”, ApJ, 722, 779.
(<https://arxiv.org/abs/1009.2183>)
8. **Grillo, C.** and Christensen, L. 2011: “*Dark matter-rich early-type galaxies in the CASSOWARY 5 strong lensing system*”, MNRAS, 418, 929.
(<https://arxiv.org/abs/1108.0678>)
9. Zitrin, A., Moustakas, J., Bradley, L., Coe, D., Moustakas, L. A., Postman, M., Shu, X., Zheng, W., Benítez, N., Bouwens, R., et al. 2012: “*CLASH: Discovery of a Bright $z \sim 6.2$ Dwarf Galaxy Quadruply Lensed by MACS J0329.6-0211*”, ApJ, 747, 9.
(<https://arxiv.org/abs/1111.5006>)
10. **Grillo, C.** 2012: “*On the Average Density Profile of Dark-matter Halos in the Inner Regions of Massive Early-type Galaxies*”, ApJ, 747, 15.
(<https://arxiv.org/abs/1202.3791>)
11. Zitrin, A., Rosati, P., Nonino, M., **Grillo, C.**, Postman, M., Coe, D., Seitz, S., Eichner, T., Broadhurst, T., Jouvel, S., et al. 2012: “*CLASH: New Multiple Images Constraining the Inner Mass Profile of MACS J1206.2-0847*”, ApJ, 749, 97.
(<https://arxiv.org/abs/1107.2649>)
12. Toft, S., Gallazzi, A., Zirm, A., Wold, M., Zibetti, S., **Grillo, C.**, and Man, A. 2012: “*Deep Absorption Line Studies of Quiescent Galaxies at $z \sim 2$: The Dynamical-mass–Size Relation and First Constraints on the Fundamental Plane*”, ApJ, 754, 3.
(<https://arxiv.org/abs/1204.3099>)
13. Vanzella, E., Nonino, M., Cristiani, S., Rosati, P., Zitrin, A., Bartelmann, M., Grazian, A., Broadhurst, T., Meneghetti, M., and **Grillo, C.** 2012: “*Probing ionizing radiation of $L \lesssim 0.1L^*$ star-forming galaxies at $z \gtrsim 3$ with strong lensing*”, MNRAS, 424, 54.
(<https://arxiv.org/abs/1205.4028>)
14. Umetsu, K., Medezinski, E., Nonino, M., Merten, J., Zitrin, A., Molino, A., **Grillo, C.**, Carrasco, M., Donahue, M., Mahdavi, A., et al. 2012: “*CLASH: Mass Distribution in and around MACS J1206.2-0847 from a Full Cluster Lensing Analysis*”, ApJ, 755, 56.
(<https://arxiv.org/abs/1204.3630>)
15. Postman, M., Lauer, T. R., Donahue, M., Graves, G., Coe, D., Moustakas, J., Koekemoer, A., Bradley, L., Ford, H. C., **Grillo, C.**, et al. 2012: “*A Brightest Cluster Galaxy with an Extremely Large Flat Core*”, ApJ, 756, 159.
(<https://arxiv.org/abs/1205.3839>)

16. Coe, D., Umetsu, K., Zitrin, A., Donahue, M., Medezinski, E., Postman, M., Carrasco, M., Anguita, T., Geller, M. J., Rines, K. J., et al. 2012: “*CLASH: Precise New Constraints on the Mass Profile of Abell 2261*”, ApJ, 757, 22.
(<https://arxiv.org/abs/1201.1616>)
17. Zheng, W., Postman, M., Zitrin, A., Moustakas, J., Shu, X., Jouvel, S., Host, O., Molino, A., Bradley, L., Coe, D., et al. 2012: “*A highly magnified candidate for a young galaxy seen when the Universe was 500 Myrs*”, Nature, 489, 406.
(<https://arxiv.org/abs/1204.2305>)
18. Christensen, L., Laursen, P., Richard, J., Hjorth, J., Milvang-Jensen, B., Dessauges-Zavadsky, M., Limousin, M., **Grillo, C.**, and Ebeling, H. 2012: “*Gravitationally Lensed Galaxies at $2 < z < 3.5$: Direct Abundance Measurements of Ly α Emitters*”, MNRAS, 427, 1973.
(<https://arxiv.org/abs/1209.0775>)
19. Christensen, L., Richard, J., Hjorth, J., Milvang-Jensen, B., Laursen, P., Limousin, M., Dessauges-Zavadsky, M., **Grillo, C.**, and Ebeling, H. 2012: “*The Low Mass End of the Fundamental Relation for Gravitationally Lensed Star Forming Galaxies at $1 < z < 6$* ”, MNRAS, 427, 1953.
(<https://arxiv.org/abs/1209.0767>)
20. **Grillo, C.**, Christensen, L., Gallazzi, A., and Rasmussen, J. 2013: “*Measuring the total and baryonic mass profiles of the very massive CASSOWARY 31 strong lens. A fossil system at $z \approx 0.7$?*”, MNRAS, 433, 2604.
(<https://arxiv.org/abs/1305.5844>)
21. Eichner, T., Seitz, S., Suyu, S. H., Halkola, A., Umetsu, K., Zitrin, A., Coe, D., Monna, A., Rosati, P., **Grillo, C.**, et al. 2013: “*Galaxy halo truncation and Giant Arc Surface Brightness Reconstruction in the Cluster MACSJ1206.2-0847*”, ApJ, 774, 124.
(<https://arxiv.org/abs/1306.5240>)
22. Biviano, A., Rosati, P., Balestra, I., Mercurio, A., Girardi, M., Nonino, M., **Grillo, C.**, Scodéggi, M., Lemze, D., Kelson, D., et al. 2013: “*CLASH-VLT: The mass, velocity-anisotropy, and pseudo-phase-space density profiles of the $z = 0.44$ galaxy cluster MACS J1206-0847*”, A&A, 558, 1.
(<https://arxiv.org/abs/1307.5867>)
23. Lemze, D., Postman, M., Genel, S., Ford, H., Balestra, I., Donahue, M., Kelson, D., Nonino, M., Mercurio, A., Biviano, A., et al. 2013: “*The contribution of halos with different mass ratios to the overall growth of cluster sized halos*”, ApJ, 776, 91.
(<https://arxiv.org/abs/1308.1675>)
24. Medezinski, E., Umetsu, K., Nonino, M., Merten, J., Zitrin, A., Broadhurst, T., Donahue, M., Sayers, J., Waizmann, J.-C., Koekemoer, A., et al. 2013: “*CLASH: Complete Lensing Analysis of the Largest Cosmic Lens MACS J0717.5+3745 and Surrounding Structures*”, ApJ, 777, 43.
(<https://arxiv.org/abs/1304.1223>)
25. Balestra, I., Vanzella, E., Rosati, P., Monna, A., **Grillo, C.**, Nonino, M., Mercurio, A., Biviano, A., Bradley, L., Coe, D., et al. 2013: “*CLASH-VLT: spectroscopic confirmation of a $z = 6.11$ quintuply lensed galaxy in the Frontier Fields Cluster RXC J2248.7-4431*”, A&A, 559, 9.
(<https://arxiv.org/abs/1309.1593>)
26. Jouvel, S., Host, O., Lahav, O., Seitz, S., Molino, A., Coe, D., Postman, M., Moustakas, L., Benitez, N., Rosati, P., et al. 2014: “*CLASH: Photometric redshifts with 16 HST bands in galaxy cluster fields*”, A&A, 562, 86.
(<https://arxiv.org/abs/1308.0063>)
27. Monna, A., Seitz, S., Greisel, N., Eichner, T., Drory, N., Postman, M., Zitrin, A., Coe, D., Halkola, A., Suyu, S. H., et al. 2014: “*CLASH: $z \sim 6$ young galaxy candidate quintuply lensed by the frontier field cluster RXC J2248.7-4431*”, MNRAS, 438, 1417.
(<https://arxiv.org/abs/1308.6280>)
28. Sartoris, B., Biviano, A., Rosati, P., Borgani, S., Bartelmann, M., Girardi, M., **Grillo, C.**, Lemze, D., Zitrin, A., Balestra, I., et al. 2014: “*CLASH-VLT: Constraints on the dark matter equation of state from accurate measurements of galaxy cluster mass profiles*”, ApJ, 783, 11.
(<https://arxiv.org/abs/1401.5800>)
29. **Grillo, C.** and Fynbo, J. P. U. 2014: “*First gravitational lensing mass estimate of a damped Lyman- α galaxy at $z = 2.2$* ”, MNRAS, 439, 100.
(<https://arxiv.org/abs/1401.5073>)

30. Smit, R., Bouwens, R. J., Labbe, I., Zheng, W., Bradley, L., Donahue, M., Lemze, D., Moustakas, J., Umetsu, K., Zitrin, A., et al. 2014: “*Evidence for Ubiquitous, High-EW Nebular Emission in $z \sim 7$ Galaxies: Towards a Clean Measurement of the Specific Star Formation Rate using a Sample of Bright, Magnified Galaxies*”, ApJ, 784, 58.
(<https://arxiv.org/abs/1307.5847>)
31. Grillo, C., Gobat, R., Presotto, V., Balestra, I., Mercurio, A., Rosati, P., Nonino, M., Vanzella, E., Christensen, L., Graves, G., et al. 2014: “*CLASH: Extending Galaxy Strong Lensing to Small Physical Scales with Distant Sources Highly-Magnified by Galaxy Cluster Members*”, ApJ, 786, 11.
(<https://arxiv.org/abs/1403.0573>)
32. Patel, B., McCully, C., Jha, S. W., Rodney, S. A., Jones, D. O., Graur, O., Merten, J., Zitrin, A., Riess, A. G., Matheson, T., et al. 2014: “*Three Gravitationally Lensed Supernovae Behind CLASH Galaxy Clusters*”, ApJ, 786, 9.
(<https://arxiv.org/abs/1312.0943>)
33. Presotto, V., Girardi, M., Nonino, M., Mercurio, A., Grillo, C., Rosati, P., Biviano, A., Annunziatella, M., Balestra, I., Cui, W., and 38 et al. 2014: “*Intra Cluster Light properties in the CLASH cluster MACS J1206.2-0847*”, A&A, 565, 126.
(<https://arxiv.org/abs/1403.4979>)
34. Bradley, L. D., Zitrin, A., Coe, D., Bouwens, R., Postman, M., Balestra, I., Grillo, C., Monna, A., Rosati, P., Seitz, S., et al. 2014: “*CLASH: A Census of Magnified Star-Forming Galaxies at $z \sim 6\text{-}8$* ”, ApJ, 792, 76.
(<https://arxiv.org/abs/1308.1692>)
35. Donahue, M., Voit, G. M., Mahdavi, A., Umetsu, K., Ettori, S., Merten, J., Postman, M., Hoffer, A., Baldi, A., Coe, D., et al. 2014: “*CLASH-X: A Comparison of Lensing and X-ray Techniques for Measuring the Mass Profiles of Galaxy Clusters*”, ApJ, 794, 136.
(<https://arxiv.org/abs/1405.7876>)
36. Annunziatella, M., Biviano, A., Mercurio, A., Nonino, M., Rosati, P., Balestra, I., Presotto, V., Girardi, M., Gobat, R., Grillo, C., et al. 2014: “*CLASH-VLT: The stellar mass function and stellar mass density profile of the $z=0.44$ cluster of galaxies MACS J1206.2-0847?*”, A&A, 571, 80.
(<https://arxiv.org/abs/1408.6356>)
37. Bouwens, R., Bradley, L., Zitrin, A., Coe, D., Franx, M., Zheng, W., Smit, R., Host, O., Postman, M., Moustakas, L., et al. 2014: “*A Census of Star-Forming Galaxies in the $z \sim 9\text{-}10$ Universe based on HST+Spitzer Observations Over 19 CLASH clusters: Three Candidate $z \sim 9\text{-}10$ Galaxies and Improved Constraints on the Star Formation Rate Density at $z \sim 9$* ”, ApJ, 795, 126.
(<https://arxiv.org/abs/1211.2230>)
38. Umetsu, K., Medezinski, E., Nonino, M., Merten, J., Postman, M., Meneghetti, M., Donahue, M., Czakon, N., Molino, A., Seitz, S., et al. 2014: “*CLASH: Weak-Lensing Shear-and-Magnification Analysis of 20 Galaxy Clusters*”, ApJ, 795, 163.
(<https://arxiv.org/abs/1404.1375>)
39. Meneghetti, M., Rasia, E., Vega, J., Merten, J., Postman, M., Yepes, G., Sembolini, F., Donahue, M., Ettori, S., Umetsu, K., et al. 2014: “*The MUSIC of CLASH: predictions on the concentration-mass relation*”, ApJ, 797, 34.
(<https://arxiv.org/abs/1404.1384>)
40. Karman, W., Caputi, K. I., Grillo, C., Balestra, I., Rosati, P., Vanzella, E., Coe, D., Christensen, L., Koekemoer, A. M., Kruehler, T., et al. 2015: “*MUSE integral-field spectroscopy towards the Frontier Fields Cluster Abell S1063: I. Data products and redshift identifications*”, A&A, 574, 11.
(<https://arxiv.org/abs/1409.3507>)
41. Grillo, C., Suyu, S. H., Rosati, P., Mercurio, A., Balestra, I., Munari, E., Nonino, M., Caminha, G. B., Lombardi, M., G. De Lucia, et al. 2015: “*CLASH-VLT: Insights on the mass substructures in the Frontier Fields cluster MACS J0416.1-2403 through accurate strong lensing modeling*”, ApJ, 800, 38.
(<https://arxiv.org/abs/1407.7866>)
42. Monna, A., Seitz, S., Zitrin, A., Geller, M. J., Grillo, C., Mercurio, A., Greisel, N., Halkola, A., Suyu, S. H., Postman, M., et al. 2015: “*Constraining the galaxies mass content in the core of A383: first case study using velocity dispersion measurements for individual cluster members*”, MNRAS, 447, 1224.
(<https://arxiv.org/abs/1412.0023>)

43. Zitrin, A., Fabris, A., Merten, J., Melchior, P., Meneghetti, M., Koekemoer, A., Coe, D., Maturi, M., Bartelmann, M., Postman, M., et al. 2015: “*Hubble Space Telescope Combined Strong and Weak Lensing Analysis of the CLASH Sample: Mass and Magnification Models and Systematic Uncertainties*”, ApJ, 801, 44.
[\(http://arxiv.org/abs/1411.1414\)](http://arxiv.org/abs/1411.1414)
44. Merten, J., Meneghetti, M., Postman, M., Umetsu, K., Zitrin, A., Medezinski, E., Nonino, M., Koekemoer, A., Melchior, P., Gruen, D., et al. 2015: “*CLASH: The Concentration-Mass Relation of Galaxy Clusters*”, ApJ, 806, 4.
[\(http://arxiv.org/abs/1404.1376\)](http://arxiv.org/abs/1404.1376)
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115. Vanzella, E., Castellano, M., Bergamini, P., Treu, T., Mercurio, A., Scarlata, C., Rosati, P., **Grillo, C.**, Acebron, A., Caminha, G. B., et al. 2022: “*Early results from GLASS-JWST. VII: evidence for lensed, gravitationally bound proto-globular clusters at $z=4$ in the Hubble Frontier Field A2744*”, *ApJ*, in press.
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ORGANIZZAZIONE, DIREZIONE E COORDINAMENTO DI CENTRI O GRUPPI DI RICERCA NAZIONALI E INTERNAZIONALI O PARTECIPAZIONE AGLI STESSI
(per ciascuna voce inserire anno, ruolo, gruppo di ricerca, ecc.)

• **MAJOR COLLABORATIONS**

- 2021 – Member of a 4MOST Extragalactic Community Survey (4SLSLS)
- 2019 – Member of the Young Supernova Experiment (YSE) at the Pan-STARRS1 and Pan-STARRS2 telescopes to discover and photometrically monitor astrophysical transients
- 2019 – PI of a Vera C. Rubin, Large Synoptic Survey Telescope (LSST) project funded by INAF
- 2018 – Member of a James Webb Space Telescope Early Release Science Program (ID 1324) and of a Cycle 1 Program (ID 1908)
- 2012 – Member of the Euclid Consortium: Strong Lensing Science Working Group
- 2010 – Core member of the VLT/VIMOS Large Programme (225 hrs) “Dark Matter Mass Distributions of Hubble Treasury Clusters and the Foundations of LCDM Structure Formation Models” (CLASH-VLT)
- 2010 – 2014 Core member of the 524-orbit Multi-Cycle HST Treasury Program “Cluster Lensing And Supernova survey with Hubble” (CLASH)

• **OBSERVATIONAL EXPERIENCE**

800+ hours of observing time (both as PI and CoI) at the Very Large, Nordic Optical, Hubble and James Webb Space Telescopes (10+ nights of experience as visiting astronomer)

• **ACCEPTED OBSERVATIONAL PROPOSALS IN THE LAST TWELVE YEARS**

- 186.A-0798 (CoI): “Dark Matter Mass Distributions of Hubble Treasury Clusters and the Foundations of LambdaCDM Structure Formation Models”, 225 hrs *VLT/VIMOS*.
- 386-0163 (PI): “The dark and luminous structure of two extraordinarily massive and compact early-type lens galaxies”, 10 hours *VLT/VIMOS*.
- 089.A-0222 (CoI): “Insights into a complex CASSOWARY lens”, 4 hrs *VLT/X-shooter*.
- 089.A-0408 (PI): “The physical properties of three magnified red galaxies at redshift $z \sim 2$ ”, 4 hrs *VLT/X-shooter*.

- 46-025 (PI): “Galaxy Group as efficient Gravitational Telescope”, 8 hrs *NOT/MOSCA* + 8 hrs *NOT/NOTCam*.
- 090.B-0126 and 089.B-0123 (CoI): “The mass structure and dynamics of evolving galaxies: dissecting a unique massive early-type galaxy at intermediate redshift”, 30 hrs *VLT/VIMOS*.
- 090.A-0152 (PI): “Probing the distribution of dark matter in the central regions of the lensing cluster Abell 209”, 8 hrs *VLT/FORS2*.
- 091.A-0852 (CoI): “The nature of the most massive elliptical galaxies at intermediate redshifts acting as strong gravitational lenses”, 18.8 hrs *VLT/X-shooter*.
- 60.A-9345(A) (CoPI): “Abell S1063”, 4 hrs *VLT/MUSE*.
- 094.A-0684 (PI): “Investigating the internal structure of galaxies through strong gravitational lensing and stellar dynamics beyond the current mass frontiers”, 27.8 hrs *VLT/X-shooter*.
- 294.A-5032 (PI): “Once in a lifetime: reconstructing a cluster mass distribution with the time delays of the first multiply-imaged supernova and MUSE unique capabilities”, 5 hrs *VLT/MUSE*.
- 095.A-0653 (CoI): “A MUSE Deep Look into the Frontier Fields Cluster Abell S1063”, 4 hrs *VLT/MUSE*.
- 095.A-0840 (CoI): “Investigating the nature of the ionizing source and the Lyman continuum leakage of a $L = 0.02 L^*$ galaxy at $z = 3.116$ magnified by the Frontier Field galaxy cluster Abell S1063”, 5 hrs *VLT/X-shooter*.
- 096.B-0994 (CoI): “Resolving the inner structure and stellar kinematics of compact quenched $z > 2$ galaxies”, 6.3 hrs *VLT/X-shooter*.
- 196.A-0778 (CoI): “The formation and evolution of galaxies from cosmic dawn to high-noon under a magnifying GLASS”, 140 hrs *VLT/KMOS*.
- 097.B-1064 (CoI): “Resolving the inner structure and stellar kinematics of a compact quenched $z > 2$ galaxy”, 10 hrs *VLT/X-shooter*.
- 197.A-0717 (CoI): “A KMOS Survey to Grasp the Essential Astrophysics of High Redshift Galaxies”, 46 hrs *VLT/KMOS*.
- 297.A-5026 (CoI): “Exploiting the extreme magnification of a caustic-crossing event. Imaging a single star at $z = 1.49$ ”, 9 hrs *VLT/FORS2*.
- 098.A-0182 (CoI): “State-of-the-art cosmic telescopes call for deep spectroscopy: imaging of faint ($0.005 L^* < L < 0.2 L^*$) star-forming galaxies at the edge of the reionization epoch”, 15 hrs *VLT/FORS2*.
- 098.A-0665 (CoI): “Pushing X-Shooter high-resolution spectroscopy to the faintest limits: unveiling the physical properties of $L < 0.1 L^*$ redshift $\gtrsim 3$ Ly α -emitters”, 20 hrs *VLT/X-shooter*.
- 099.A-0804 (CoI): “Unveiling the physical and ionizing properties of newborn $z \gtrsim 3$ sources: witnessing globular cluster formation”, 3.8 hrs *VLT/X-shooter* + 16 hrs *VLT/FORS2*.
- 099.B-0912 (CoI): “Resolving the inner structure and stellar kinematics of a compact quenched $z \sim 2$ galaxy”, 4 hrs *VLT/X-shooter*.
- 0100.A-0763 (CoI): “MUSE at the focus of gravitational telescopes: the deepest view of forming star-clusters in the early Universe”, 22 hrs *VLT/MUSE*.
- GO15253 (CoI): “The nature of ultra-massive lens galaxies”, 8 orbits *HST/WFC3*.
- 0101.B-0619 (CoI): “The nature of ultra-massive lens galaxies”, 5.7 hrs *VLT/X-shooter*.
- 0101.B-0262 (CoI): “A new metallicity diagnostic of high-redshift galaxies from direct abundance measurements”, 16 hrs *VLT/X-shooter*.
- 0102.A-0266 (CoI): “MUSE, HST and gravitational lensing at full power to probe the galaxy faint luminosity function at $z \sim 5.5\text{--}6.5$ and the inner mass distribution of ultra-massive galaxy clusters at $z = 0.5\text{--}0.9$ ”, 18 hrs *VLT/MUSE*.
- 0102.A-0391 (CoI): “An in-depth study with X-Shooter and MUSE of the unique Lyman continuum emitting galaxies at $z = 3\text{--}4$ ”, 5 hrs *VLT/X-shooter*.
- 0102.A-0619 (CoI): “Nature’s largest, high-resolution, wide-field, cosmic telescope”, 15.5 hrs *VLT/HAWK-I*.
- 0102.A-0640 (CoI): “Probing the nature of a giant gravitational telescope and the lensed primordial galaxies with MUSE”, 12 hrs *VLT/MUSE*.
- 0102.A-0642 (PI): “Venturing into the cosmos with MUSE: first estimates of the expansion rate and the geometry of the Universe with a quasar multiply lensed by a galaxy cluster”, 5 hrs *VLT/MUSE*.
- 0103.A-0688 (CoI): “The Rosetta Stone of stellar ionization: an exceptionally bright gravitationally lensed Lyman continuum emitter at $z = 2.4$ ”, 2.5 hrs *VLT/X-shooter* + 2.6 hrs *VLT/MUSE*.
- 0103.A-0554 (PI): “MUSE unique capabilities for accurate new measurements of the cosmic expansion rate and geometry through time delays in a rare lens galaxy cluster”, 5 hrs *VLT/MUSE*.

- 0104.A-0254 (CoI): “Measuring the Hubble constant to within 2% with four quasar lenses and MUSE-WFM”, 18 hrs *VLT/MUSE*.
- 0104.A-0830 (CoI): “A unique lens galaxy group with a central ultra-massive elliptical galaxy: probing its mass distribution using the outstanding capabilities of MUSE”, 5 hrs *VLT/MUSE*.
- 0105.A-0272 (CoI): “Refining the measurement of H0 with SN Refsdal and determining the intrinsic physical properties of a $z=9.1$ proto-galaxy”, 5 hrs *VLT/MUSE*.
- 0105.A-0387 (CoI): “The Rosetta Stone of stellar ionization: an exceptionally bright gravitationally lensed Lyman continuum emitter at $z = 2.4$ ”, 9 hrs *VLT/KMOS*.
- 0106.A-0547 (CoI): “VST-GAME: Galaxy Assembly as a function of Mass and Environment with VST”, 59 hrs *VST/OMEGACAM*.
- 2107.D-5057 (CoI): “The conundrum of the transient stellar object in the Sunburst arc (SCTYPE-C)”, 5 hrs *VLT/MUSE*.
- 0110.A-0248 (CoI): “The geometry of the Universe with MUSE: a rare system of three sources multiply-imaged by an ultra-massive lens galaxy”, 5 hrs *VLT/MUSE*.
- 0110.B-0242 (CoI): “The conundrum of the transient stellar object in the Sunburst arc at $z=2.37$ ”, 7 hrs *VLT/MUSE*.
- 0110.B-4233 (CoI): “X-Shooter explores population III star complex at $z=6.629$ and a proto-globular at $z=3.235$ ”, 37.5 hrs *VLT/X-shooter*.
- ERS 1324 (Collaborator): “Through the Looking GLASS: A JWST Exploration of Galaxy Formation and Evolution from Cosmic Dawn to Present Day”, *JWST* (35 ks *NIRISS*; 52 ks *NIRSpec*; 80 ks *NIRCam*).
- GO 1908 (CoI): “Constraining the Nature of the First Stellar Complexes: Globular Cluster Precursors and Population III Stellar Clusters at $z \sim 6-7$ ”, *JWST* (24.5 hrs *NIRSpec*).

PREMI E RICONOSCIMENTI NAZIONALI E INTERNAZIONALI PER ATTIVITÀ DI RICERCA

(inserire premio, data, ente organizzatore, ecc.)

- 2022 – (2025) PRIN 2020 MIUR (3 nodes involved: PI of the project, at the UniMi), 540 K€ (total): funding for three two-year post-doc salaries plus research grant
- 2022 – (2024) Supervisor of a H2020-MSCA-IF-2020 project (101024195; ROSEAU) awarded to Ana Acebron at the UniMi, 170 K€: funding for a two-year post-doc salary plus research funding
- 2021 Prize “Antonio Feltrinelli Giovani” in the field of Astronomy (40 K€)
- 2019 – (2023) PRIN 2017 MIUR (4 nodes involved: leader of one of them, at the UniMi), 620 K€ (total): funding for four two-year post-doc salaries plus research grant
- 2019 – 2021 Main-stream Programmes at INAF (CoI of two programmes), 64 K€ (total): funding for research activities and equipment
- 2017 – (2026) Habilitations to Associate and Full Professor positions in Astronomy and Astrophysics
- 2016 – 2019 Programme for Young Researchers “Rita Levi Montalcini” (>110 applicants) (PI), 209 K€: funding for own salary plus research grant at the Physics Department, UniMi, Italy
- 2015 – 2018 VILLUM FONDEN Young Investigator Programme (>250 applicants) (PI), 535 K€: funding for own and a two-year post-doc salaries plus research funding at the Centre of Excellence “Dark Cosmology Centre”, NBI, Copenhagen, Denmark
- 2012 – 2015 Research Fellowship (3 years) (>200 applicants), Centre of Excellence “Dark Cosmology Centre”, NBI, Copenhagen, Denmark
- 2010 – 2012 Research Fellowship (2 years) (>40 applicants), Cluster of Excellence for Fundamental Physics “Origin and Structure of the Universe”, Garching, Germany
- 2006 – 2008 Research Studentship (1.5 years), European Southern Observatory (ESO), Garching, Germany

PARTECIPAZIONE IN QUALITÀ DI RELATORE A CONGRESSI E CONVEgni DI INTERESSE INTERNAZIONALE

(inserire titolo congresso/convegno, data, ecc.)

- **SELECTED INVITED AND CONTRIBUTED ORAL PRESENTATIONS AT INTERNATIONAL EVENTS**
- Seeing the Universe through machine learning strong lensing, Jun. 30 2022, European Astronomical Society Annual Meeting 2022, Valencia.

- Exploiting the synergy between LSST and VST to investigate the cosmos, Jun. 11 2020, “*VST beyond 2021*”, online.
- Cosmological applications of time-varying sources strongly lensed by galaxy clusters, Oct. 15 2019, Bologna.
- Making progress in the understanding of the (inner) mass structure of galaxy clusters, Jul. 8 2019, “*Tracing Cosmic Evolution with Clusters of Galaxies*”, Sexten.
- Cosmological applications of time-varying sources strongly lensed by galaxy clusters, Jun. 20 2019, “*Strong gravitational lensing by galaxies and clusters*”, Skye.
- Cosmological applications of time-varying sources strongly lensed by galaxy clusters, Feb. 7 2019, “*Cosmic Beacons*”, Sexten.
- Probing the cores of galaxy clusters with strong gravitational lensing, “*Cluster II*”, Sep. 12 2018, Naples.
- Modelling lenses and sources with HST and MUSE data in HFF MACS 1149 (and a bit more), Jul. 24 2017, “*Exploring dark matter and dark ages with lensing clusters*”, Sexten.
- Modelling lenses and sources with HST and MUSE data in HFF MACS 1149, Jun. 26 2017, “*Strong gravitational lensing by galaxies and clusters*”, Cogne.
- Advances in the understanding of the mass structure of galaxy clusters, Feb. 27 2017, “*Cluster I*”, Torino.
- MUSE observations enable the prediction of a once-in-a-lifetime lensed supernova, Jul. 7 2016, European Week of Astronomy and Space Science 2016, Athens.
- Advances in the understanding of the mass structure of galaxy clusters, Jul. 6 2016, European Week of Astronomy and Space Science 2016, Athens.
- The mass structure of galaxy clusters probed with strong gravitational lensing, May 17 2016, ESO, Garching.
- Spectroscopy as a key diagnostic tool in astrophysics, Mar. 31 2016, “*4th International Conference Frontiers in Diagnostic Technologies*”, Frascati.
- Dark matter viewed through strong lensing, Feb. 24 2016, “*Astrophysics of Dark Matter*”, Sexten.
- The Hubble Frontier Fields scrutinised by the Very Large Telescope, Aug. 3 2015, XXIX IAU General Assembly, Honolulu.
- The total mass reconstruction and the inner subhalo population of the galaxy cluster MACS J0416.1-2403, Mar. 22 2015, Kapteyn Astronomical Institute, University of Groningen.
- The total mass reconstruction and the inner subhalo population of the galaxy cluster MACS J0416.1-2403, Nov. 19 2014, “*Galaxies and Cosmology in Light of Strong Lensing*”, Kavli IPMU, Kashiwa.
- The dark-matter haloes of massive galaxies and clusters of galaxies, Nov. 11 2014, Academia Sinica Institute of Astronomy and Astrophysics, Taipei.
- Strong lensing modeling in the CLASH and Frontier Fields cluster MACS J0416.1-2403: the total mass reconstruction and the inner subhalo population, Jun. 23 2014, “*Future Directions in Galaxy Cluster Surveys*”, Paris.
- The successful synergy between HST and VLT: accurate strong lensing modeling in the CLASH and Frontier Fields cluster MACS J0416-2403, Mar. 19 2014, “*Science with the Hubble Space Telescope IV: Looking to the Future*”, Rome.
- The mass structure of massive lens galaxies, Feb. 6 2014, “*Unveiling the Formation of Massive Galaxies - Theoretical and Observational Challenges*”, Aspen.
- Revisiting MACS J0416.1-2403 using spectra and GLEE, Sep. 18 2013, Royal Astronomical Society, London.
- Disentangling dark-matter profiles in CLASH galaxy clusters, Jul. 1 2013, “*Tracing Cosmic Evolution with Clusters of Galaxies*”, Sexten.
- The inner slope(s) of dark matter haloes: ‘hidden’ baryonic and/or CDM physics?, Jun. 18 2013, “*Galaxy formation under the magnifying glass of gravitational lensing*”, Courmayeur.
- Studying dark matter in lens galaxies and galaxy clusters, Mar. 26 2013, Department of Physics, University of Trieste.
- Strong gravitational lensing at different physical scales, Dec. 7 2012, Department of Astronomy, Stockholm University.
- Dark matter measurements in CLASH clusters, Oct. 16 2012, Universidad del País Vasco/Euskal Herriko Unibertsitatea, Bilbao.
- Strong gravitational lensing from galaxies to clusters of galaxies, Jul. 13 2012, “*Workshop in honor of Giuseppe Bertin’s 60th birthday*”, Como.

- Lens magnification estimates for high-redshift galaxies, Oct. 19 2011, Internationales Wissenschaftsforum, Heidelberg.
- Massive early-type galaxies as strong gravitational lenses, Jul. 5 2011, “*A New Generation of Galaxy Clusters Surveys*”, Sexten.
- Dark matter in strong gravitational lenses, Jun. 28 2011, “*Dark matter from globular clusters to clusters of galaxies*”, Bologna.
- The dark-matter haloes of massive early-type galaxies, Jun. 20 2011, “*Strong gravitational lensing from stars to dark matter haloes*”, Courmayeur.
- Dark matter in massive early-type galaxies, Jan. 20 2011, NASA Jet Propulsion Laboratory, Pasadena.
- Cosmology with Strong Gravitational Lensing, Jan. 11 2011, “*Essential Cosmology for the Next Generation*”, Puerto Vallarta.
- Luminous and dark-matter in early-type lens galaxies, Aug. 3 2009, XXVII IAU General Assembly, Rio de Janeiro.
- Early-type lens galaxies as strong gravitational lenses, Jun. 22 2009, “*Strong Gravitational Lensing in the Next Decade*”, Cogne.
- Mass decomposition in early-type galaxies: luminous and dark matter from lensing and photometric measurements, Sep. 29 2008, “*Dark Matter, Dark Energy and Dark Ages with Gravitational Lensing*”, Sydney.
- Cosmological parameters from strong gravitational lensing and stellar dynamics in elliptical galaxies, Aug. 30 2007, “*A Century of Cosmology. Past, Present, and Future*”, San Servolo.
- Mass estimates in a lens galaxy at high redshift, Jun. 18 2007, “*Dark Matter in Galaxies and Galaxy Clusters*”, Bologna.
- Strong lensing by a galaxy member of the distant cluster Cl J 0152.7-1357, Sep. 28 2006, Kavli Institute for Theoretical Physics, Santa Barbara.
- Strong lensing analysis of RDCS 1252.9-2927, May 30 2005, “*Luminous and Dark Matter in Galaxies and Clusters of Galaxies*”, Bologna.

ATTIVITÀ GESTIONALI, ORGANIZZATIVE E DI SERVIZIO

INCARICHI DI GESTIONE E AD IMPEGNI ASSUNTI IN ORGANI COLLEGIALI E COMMISSIONI, PRESSO RILEVANTI ENTI PUBBLICI E PRIVATI E ORGANIZZAZIONI SCIENTIFICHE E CULTURALI, OVVERO PRESSO L'ATENEO O ALTRI ATENEI

(inserire incarico/impegno, ente, data, ecc.)

• INSTITUTIONAL RESPONSIBILITIES

- | | |
|-------------|-----------------------------------------------------------------|
| 2022 | Member of a postdoc Hiring Committee, Physics Department, UniMi |
| 2017 – | Member of the PhD Faculty Committee, Physics Department, UniMi |
| 2015 | Contributor to the new Astrophysics MSc curriculum, NBI, KU |
| 2014 – 2017 | Member of the Hiring Committee, NBI, KU |

• COMMISSIONS OF TRUST

- | | |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2019 | Invited reviewer for the funding programme <i>Talent Programmes Veni, Vidi and Vici</i> of the Dutch Research Council (NWO) |
| 2010 – | Journal Referee for: The Astrophysical Journal, Monthly Notices of the Royal Astronomical Society, Astronomy & Astrophysics, The European Physical Journal Plus |
| 2017 | Chair of the PhD evaluation committee of Anthea King (KU, Denmark and University of Queensland, Australia) |
| 2015 | Invited reviewer for the funding programme <i>FONDECYT Regular 2016 grant competition</i> of the Chilean National Science and Technology Commission (CONICYT - Chile) |
| 2011 | Invited reviewer for the funding programme <i>Excellence in Research</i> of the Romanian National Council for Scientific Research |

• ORGANIZATION OF SCIENTIFIC MEETINGS AND SCHOOLS

- | | |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------|
| (2023) | Member of the SOC of the international conference <i>IAUS 381: Strong gravitational lensing in the era of big data</i> , Otranto, Italy |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------|

- 2022 Member of the SOC of the international conference *Zooming into dark matter and proto-galaxies with gravitational lensing*, Sexten, Italy
- 2021 Co-chair of the *Cosmography with Gravitational Lensing* parallel session at the Sixteenth Marcel Grossman Meeting, online
- 2019 Member of the SOC of the international conference *Matera Oscura: Cosmology and Dark Matter within Galaxies and Clusters*, Matera, Italy
- 2018 Co-chair of the international conference *The Universe as a telescope: probing the cosmos at all scales with strong lensing*, UniMi, Italy
- 2018 Member of the SOC of the MSc and PhD School *Hands-on multi-probe mass measurements in galaxy clusters*, UniMi, Italy
- 2015 Organizer of the workshop *Shedding light on dark matter in galaxy clusters*, KU, Denmark
- 2011 Chair of the international PhD School *Hands-on Strong Gravitational Lensing*, Cluster of Excellence “Origin and Structure of the Universe”, Garching, Germany

• **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 2018 – Italian National Institute for Astrophysics (INAF)
- 2015 – International Astronomical Union (IAU)

Data

2 settembre 2022

Luogo

Milano