

**Procedura selettiva per la copertura di 1 posto da
ricercatore a tempo determinato - Tipologia B**

Dipartimento di Fisica

Facoltà di Scienze Matematiche, Fisiche e Naturali

N. posti 1

Settore concorsuale: 02/C1

Settore Scientifico Disciplinare: FIS/05

CODICE CONCORSO 2019RTDB017

Decreto Rettore Università di Roma "La Sapienza" n. 2511/2019 del 7/08/2019

**Luca Lamagna
Curriculum Vitae**

Roma, 08/10/2019

PERSONAL INFORMATION **Luca Lamagna**

Gender Male | Nationality Italian

LANGUAGES

Italian (Mothertongue), English (C1), Japanese (A1)

EDUCATION

- 1994–1998 **Master's Degree course in Physics (astrophysics curriculum)**
Università degli Studi di Roma "La Sapienza"
Average grades: 30 out of 30, with 10 *cum laude* declarations
- 1999 **Master's Degree**
Thesis title: "Measurement of the Sunyaev–Zel'dovich effect on the A1656 cluster of galaxies"
Università degli Studi di Roma "La Sapienza"
final grade: 110/110 *cum laude*.
- 1999–2002 **Ph.D. in Physics, XV cycle**
Thesis title: "Measurements of the Sunyaev-Zel'dovich Effect from the MITO observatory: current status, instrumental upgrades and future prospects."
Thesis defended on January 20, 2003

ACADEMIC APPOINTMENTS

- 2003–2004 **Post-doctoral fellowship (assegno di ricerca) on "Measurement of the cosmic background temperature at high redshifts"**
Dipartimento di Fisica, "Sapienza" Università di Roma
- 2005–2007 **Post-doctoral fellowship (assegno di ricerca) on "FIR multi-channel photometry"**
Dipartimento di Fisica, "Sapienza" Università di Roma
- 2008–2009 **Post-doctoral fellowship (assegno di ricerca) on "Development and characterization of instrumentation for precision measurements of the Sunyaev–Zel'dovich Effect"**
Dipartimento di Fisica, "Sapienza" Università di Roma
- 2010–2012 **Non-tenure assistant professor (RTD), title of reasearch: "Studies of Cosmology and fundamental Physics from Space"**
Dipartimento di Fisica, "Sapienza" Università di Roma
- 2012–2017 **Non-tenure assistant professor (RTD-A), title of reasearch: "Detector Development for Studies of the Cosmic Microwave Background"**
Dipartimento di Fisica, "Sapienza" Università di Roma
- 2018–today **Non-tenure assistant professor (RTD-A), title of reasearch: "Development of Instrumentation for Precision Measurements of the Cosmic Microwave Background"**

Dipartimento di Fisica, "Sapienza" Università di Roma

TEACHING EXPERIENCE

- 2001 Laboratory classes in "Esperimentazioni di fisica I" for degree course in Physics, Università di Roma "La Sapienza".
- 2002 Exercise classes in "Fisica Generale I" for degree course in Physics, Università di Roma "La Sapienza".
- 2004 Internship assistance for BD course in Physics and Astrophysics, Università di Roma "La Sapienza".
- 2005 Laboratory classes in "Laboratorio di Astrofisica I" for BD course in Astronomy and Astrophysics, Università di Roma "La Sapienza".
- 2007 Exercise classes in "Fisica Generale II" for BD course in Mathematics, Università di Roma "La Sapienza".
- 2011-2012 Exercise classes in "Elettromagnetismo" for BD course in Astronomy and Astrophysics, "Sapienza" – Università di Roma.
Laboratory classes in "Laboratorio di Elettromagnetismo" for BD course in Physics and Astrophysics, "Sapienza" – Università di Roma.
- 2012-2013 Exercise classes in "Elettromagnetismo" for BD course in Physics and Astrophysics, "Sapienza" – Università di Roma.
Laboratory classes in "Laboratorio di Elettromagnetismo" for BD course in Physics and Astrophysics, "Sapienza" – Università di Roma.
- 2013-2014 Class in "Physics of Galaxies and Galaxy Clusters" for Master's Degree Course in Astronomy and Astrophysics, "Sapienza" – Università di Roma.
- 2014-2015 Class in "Physics of Galaxies and Galaxy Clusters" for Master's Degree Course in Astronomy and Astrophysics, "Sapienza" – Università di Roma.
- 2015-2016 Exercise classes in "Elettromagnetismo" for BD course in Physics, "Sapienza" – Università di Roma.
Membership of the faculty board of the "International Relativistic Astrophysics Ph.D.", cycle XXXI
- 2016-2017 Membership of the faculty board of the "International Relativistic Astrophysics Ph.D.", cycle XXXII
- 2017-2018 Exercise classes in "Elettromagnetismo" for BD course in Physics, "Sapienza" – Università di Roma.
- 2018-2019 Class in "Observational Cosmology" for Master's Degree Course in Astronomy and Astrophysics, "Sapienza" – Università di Roma.
- 2019-2020 Class in "Observational Cosmology" for Master's Degree Course in Astronomy and Astrophysics, "Sapienza" – Università di Roma.

ACADEMIC SUPERVISION

- 2001-2010 Co-supervisor of 15 master's degree theses on various topics related to instrumentation and data analysis for observational cosmology.
- 2013-today Supervisor of 27 BD theses for Physics/Physics and Astrophysics BD courses.
Supervisor of 3 Master's Degree theses in Astronomy and Astrophysics.

MEMBERSHIPS, AWARDS AND HONORS

- 2000 "Tito Maiani" prize from Accademia Nazionale dei Lincei.
- 2004 Medal of PNRA for the contribution to the scientific activity at the Terranova Bay Station, during the XIX Italian Antarctic Expedition (October-December 2003).
- 2008 Successful application for the participation to the 58th Lindau Nobel Laureate Meeting.
- 2009 Award for the best presentation for session "Astrophysics and Cosmic Physics" at the Annual Congress of the Italian Physics Society.

GRANT INFORMATION

- 2009 PRIN 2009 - Investigator - "Differential Fourier Transform Spectrometer (DFTS) for Large Millimeter Telescopes" (PI P. de Bernardis), grant amount: 103000€
Sapienza, bando di Ateneo 2009 - prot. C26A09FTJ7 - Investigator - "Precision Observational Cosmology" (PI P. de Bernardis), grant amount: 40600€
- 2010 Sapienza, bando di Ateneo 2010 - prot. C26A10AB9R - Investigator - "Analysis and measurements of systematic effects and optimization of observational cosmology experiments in microwave band" (PI F. Piacentini), grant amount: 15000€
- 2010 "Acquisizione di Medie e Grandi Attrezzature Scientifiche" - Sapienza Università di Roma - "Calibrazione vettoriale di rivelatori innovativi a microonde: strumento da laboratorio, per calibrare nuovi rivelatori a microonde fino a frequenze di 110 GHz." (PI S. Masi) - prot. C26G1042ES - Investigator - grant amount: 90000€
- 2011 Sapienza, bando di Ateneo 2011 - prot. C26A11JPNS - Investigator - "Instrument optimization for observational cosmology experiments" (PI F. Piacentini), grant amount: 11000€
- 2012 Sapienza, bando di Ateneo 2012 - prot. C26A12PC4R - Investigator - "Data analysis, observation and instrumentation for astrophysical experiments in the microwave band" (PI F. Piacentini), grant amount: 6000€
- 2013 Italian Antarctic Research Program Call 2013 - Investigator - "CASPER: an atmosphere monitor at millimetre/submillimetre wavelengths for supporting astrophysical Antarctic observations" (PI M. De Petris), PdR2013/AC3.04, grant amount: 59000€
Call for visiting professors at Sapienza - prot. C26V13ZRPW - Principal Investigator, grant amount: 16000€
Sapienza, bando di Ateneo 2013 - prot. C26A135JC3 - Investigator - "The Sunyaev-Zel'dovich Effect towards synthetic cluster of galaxies to explore the Universe" (PI M. De Petris), grant amount: 7000€+22946.04€
- 2014 Progetti AWARDS Sapienza Università di Roma - "Precision cosmology and fundamental physics" (PI P. de Bernardis) - Leader of the work package "DESIGN AND OPTIMIZATION OF MULTI-MODED FIELD OPTICS FOR MM/SUBMM WAVELENGTHS", grant amount: 48000€
Bando Regione Lazio "Progetti di Ricerca presentati da Università e Centri di Ricerca" - Investigator - "FAcility di Test e sviluppo di tecnologie Avanzate per ambiente spaziale" (PI P. de Bernardis), grant amount: 247990€
- 2015 "Grandi Ricerche Universitarie" - Sapienza Università di Roma "Precision cosmology and fundamental physics" (PI P. de Bernardis) - prot. C26H15EB3Y - Leader of the work package "DESIGN AND OPTIMIZATION OF MULTI-MODED FIELD OPTICS FOR MM/SUBMM WAVELENGTHS", grant amount: 63450€
"Acquisizione di Grandi Attrezzature Scientifiche" - Sapienza Università di Roma - "PRECISION HIGH COMPLEXITY MECHANICAL PROTOTYPING. Procurement and installation of a precision (20 micron) 3D printer for metals, to serve different laboratories and researches in the Sapienza Athenaeum, producing parts, systems and prototypes not machinable with standard techniques." (PI S. Masi) - prot. C26J158LRZ - Investigator - grant amount: 250000€

- 2016 Proposals for the INAF Radio Telescopes - Investigator - "Mapping the microwave emission of Andromeda: filling the gap between radio and IR emission" (PI E. Battistelli), grant amount: 64 hours of observation at the Sardinia Radio Telescope
Sapienza, bando di Ateneo 2016 - prot. RP116154E848447B - Investigator - "Development of a simple payload for Winter long duration stratospheric balloons from Polar regions" (PI F. Piacentini), grant amount: 5000€
Italian Antarctic Research Program Call 2016 – Research proposals with activities to be carried out at Concordia station - "Kinetic Inductance Detectors for astronomical observations at millimetric and sub-millimetric wavelengths from Antarctica" (PI E. Battistelli) - PNRA16_00266 - Leader of the work package "Test of detector arrays", grant amount: 90200€
- 2017 PRIN 2017 - Project 20178ZHP5 "COSMO - COSmological Monopole Observations" (P.I. P. de Bernardis), grant amount: 211583€
- 2018 Proposals for the INAF Radio Telescopes - Investigator - "Study of the Microwave emission of M31 in the K-band" (PI E. Battistelli), grant amount: 300 hours of observation at the Sardinia Radio Telescope
- 2019 Local coordinator at the Roma1 section of INFN for the funded activity "RADIATION FROM THE UNIVERSE" (PI G. Signorelli) associated to LiteBIRD - grant amount: 6500€

RESEARCH ACTIVITIES

1999-2007 MITO experiment.

- Optimization of the cryogenic performance of the receiver.
- Calibration in the laboratory.
- Analysis of calibration and secondary CMB anisotropy data collected at the telescope.
- Development of the receiver upgrade into a multi-pixel, multi-color bolometer array.
- I have participated to all the observational activity performed at the MITO site since 1999 to date.

2003 OASI experiment.

- Development of the data acquisition software for the receiver.
- Troubleshooting of the telescope pointing software.
- Observational activity at the telescope during the 2003 Antarctic Campaign.

2004-2015 CASPER and CASPER-2 experiments.

- Development of the cryogenics control software and of the data acquisition software for the spectrometer.
- Spectrometer calibration and atmospheric emission measurements for site-testing.
- Observational activity at the MITO site for performance validation of the instrument.
- Atmospheric emission modeling of the MITO site through the ATM software and analysis of the observational data.

2008-2009 SAGACE satellite.

- Software development for simulation and performance forecasts for the Phase A study.
- Definition of requirements for spectrometer and detectors performance.
- Assessment of the impact of observing strategy and instrument systematics.

2009-today OLIMPO experiment.

- Troubleshooting of the cryogenic system.
- Detector tests.
- Photometric calibration.
- Control and data acquisition.
- Participation to the 2014 launch campaign from Longyearbyen (Svalbard islands).
- Contribution to the integration and the characterization of the kinetic inductance detectors for the upgraded receiver, in preparation of the 2018 launch campaign.
- Participation to the 2018 launch campaign from Longyearbyen (Svalbard islands) and to the following payload and data recovery campaign (Ellesmere Island, Canada).

2011-today Galaxy clusters in the MUSIC simulations.

Studies of scaling relations, self-similarity, deviations from hydrostatic equilibrium, observable consequences of thermal phenomena taking place in hot gas within galaxy clusters.

2012-today LSPE experiment.

- Electromagnetic design and testing of the horn antennas for the focal planes of the SWIPE instrument.
- Electromagnetic design and testing of the anti-reflection surfaces of the SWIPE optical system.
- Since 2017: appointed Project Manager for the SWIPE instrument.

2013 PRISM satellite.

Member of the science team and co-author of the Science Program document submitted to ESA in response to the 2013 call for large missions (L2-L3).

2014 CORe+ satellite.

Member of the science team and co-author of the Science Program document submitted to ESA in response to the 2014 call for medium missions (M4).

2015-today Kinetic Inductance Detectors.

- Electromagnetic simulations for optical coupling optimization.
- Laboratory testing for optical and electrical characterization.
- Implementation of KID technology in the upgraded OLIMPO receiver.
- Contributions to the design, the electromagnetic simulation and the prototype characterization for various technological development projects funded by ASI.

Multi-moded Optics.

Development of methods and hardware design for multi-moded operation of microwave detectors.

2016 CORe satellite.

Member of the team co-authoring the proposal submitted to ESA in response to the 2016 call for the M5 mission.

2017 KISS Experiment.

Development of the broadband anti-reflection surface for the radiation window of the cryostat.

2018-today LiteBIRD satellite.

Member of the team contributing to the ESA-Concurrent Design Facility study of the high frequency instrument, as a leader of the work-package on optics design implementation. Following satellite approval by JAXA, appointed point of contact for the development of microwave absorbers and cold aperture stop of the high frequency telescopes. Member of the Medium and High Frequency Telescope optics working group; local coordinator for the Rm1 unit of the INFN LiteBIRD-related activity.

Studies of Anomalous Microwave Emission

Co-proposer of the observation and mapping plan of the M31 galaxy for AME studies. Activity now supported by INAF with 350+ hours of allocated integration time from the Sardinia Radio Telescope.

2019 QUBIC experiment.

Development of the multi-moded horn antennas for the upgraded version of the 150GHz receiver.

INVITED TALKS

- 2003 Us-Japan seminar on "Cosmology with clusters of galaxies", Kyosato, Japan - contribution title: "SZ effect from MITO: Current status, recent results and future prospects"
- 2005 International Workshop on "Cosmology with SZ and X-ray observatories", Tokyo, Japan - contribution title: "The SZ effect as a Cosmic thermometer"
- 2006 Francesco Melchiorri Memorial Conference, Rome - contribution title: "Additional probing capabilities of the SZ effect"
- 2013 International Conference on Electromagnetics for Advanced Applications, special session on "Electromagnetic Applications for Astronomy and Astrophysics", Turin - contribution title: "Multi-mode focal planes for high precision measurements of large scale CMB polarization"
- 2017 International Conference "Tsukuba Global Science Week", Tsukuba, Japan - contribution title: "Precision Observations of Galaxy Clusters through Broadband Spectroscopy of the Sunyaev-Zeldovich Effect"

OTHER CONTRIBUTIONS TO CONFERENCES, WORKSHOPS AND SEMINARS

- 2001 2k1BC Workshop on experimental Cosmology at mm wavelengths, Cervinia - Contribution title: "The MAD-4-MITO Project"
- 2004 International School of Physics "Enrico Fermi", Varenna - Lecture title: "MAD, the Multi Array of Detectors for MITO"
- 2009 Workshop "SZ@Bonn 2009 - A multiwavelength look at galaxy clusters", Bonn - contribution title "SZ spectroscopy with SAGACE, the Spectroscopic Active Galaxies and Clusters Explorer"
XV National Congress of the Italian Physics Society, Bari - contribution title: "The Sunyaev-Zel'dovich Effect as a cosmic thermometer: Methods, results, future prospects"
- 2010 International Workshop "CLJ2010+0628: from massive galaxy formation to dark energy", Kashiwa, Japan - contribution title: "Understanding Galaxy Clusters through Fourier Transform Spectroscopy of the Sunyaev-Zel'dovich Effect"
"Eventi Balzan 2010", Accademia Nazionale dei Lincei, Rome - contribution title: "Ammassi di galassie a lunghezze d'onda millimetriche: l'impronta dei giganti del cosmo sul fondo di radiazione a microonde"
- 2013 Il SCAR meeting on Astronomy and Astrophysics from Antarctica, Siena - contribution title: "Synthetic and Measured Atmospheric Spectra at mm and submm wavelengths from Dome C"
- 2015 XIV Marcel Grossmann Meeting, Rome - contribution title: "The Large Scale Polarization Explorer"
36th ESA Antenna Workshop, ESA/Estec (NL) - contribution title: "Development of the Multi-Moded Pixels for the LSPE/SWIPE Focal Plane"
- 2017 Workshop "Science with Stratospheric Balloons", ASI Headquarters, Rome - contribution title: "The Large Scale Polarization Explorer: an Italian contribution to the search for CMB B-modes"
- 2018 European Week of Astronomy and Space Science, Liverpool (UK) - contribution title: "Search for Primordial B-modes in the CMB Polarization with LSPE/SWIPE"
- 2019 ASI/COSMOS meeting on "Ground-based CMB experiments", Milan - contribution title: "Optics design and implementation for LiteBIRD MFT/HFT"
18th International Workshop on Low Temperature Detectors, Milan - contribution title: "Progress report on the Large Scale Polarization Explorer"

SKILLS

Cryogenics In my research field, the need to operate detectors at sub-K temperatures brought me to build the expertise to achieve such operating condition through dedicated instrumentation. I am therefore able to handle cryostats, vacuum pumps, cryogenic liquids (nitrogen, helium), mechanical cryocoolers, sorption and dilution refrigerators. I am also able to deal with design, optimization and troubleshooting of such instrumentation, including cryogenic cabling, management of thermal loading, temperature monitoring and control.

Analog Electronics Development, fabrication and testing of hardware for small-signal extraction from noise, including multi-stage amplification, filtering, modulation and synchronous demodulation.

Electromagnetic Design Electromagnetic simulation for optical and quasi-optical performance evaluation of detectors and their coupling components, filters, polarizers, lenses and mirrors.

Data analysis Techniques of calibration and characterization for detectors at mm wavelengths, both in intensity and in polarization. Development of code and algorithms for photometric and spectroscopic data. Software development for analysis and management of large scale structure simulations and coding of Monte Carlo Markov Chain algorithms for statistical analysis of scientific data.

Stratospheric payload integration Participation to instrument integration in two launch campaigns of the OLIMPO payload. Participation to the 2018 payload recovery campaign. Expertise in planning, scheduling, logistics and resource procurement.

Management skills My laboratory activity is intrinsically based on the capability to coordinate efforts and optimize teamwork. I participated to many coordinated efforts for the preparation of science proposals and actively contributed to the management of the teaching activity for the classes assigned to me. I also worked as Scientific Secretary for the following events:

- International School of Physics “Enrico Fermi” - Course 159: “Background Microwave Radiation and Intracluster Cosmology” (Varenna, 2004)
- “Francesco Melchiorri Memorial Conference” (Rome, 2006)
- International School of Physics “Enrico Fermi” - Course 186: “New Horizons for Observational Cosmology” (Varenna, 2013)

Since March 2017 I am appointed Project Manager for the SWIPE instrument of the LSPE program, funded by ASI and INFN.

Computer and IT-related skills

- confidence with Windows and Linux environments
- programming in IDL (preferred), Fortran, Python, C++
- electromagnetic simulation through Ansys Electronics Desktop (HFSS)
- mechanical design with Autocad and Solidworks
- data acquisition and instrument control in Labview
- circuit design and layout with Orcad
- MS Office applications
- LaTeX
- HTML

SUMMARY OF SCIENTIFIC ACHIEVEMENTS

Reference database	SCOPUS
Number of publications	79
Total citations	990
Average citations/product	12.5
h-index	17
Normalized h-index (academic seniority=18 years)	0.94
Number of publications (10 years)	59
Total citations (10 years)	814
Average citations/product (10 years)	13.8
h-index (10 years)	16

JOURNAL CITATION REPORT

Papers with available Impact Factor	39
Total Impact Factor	174.316
Average Impact Factor	4.470

SELECTED PUBLICATIONS (SINCE JAN 1, 2012)

- 1 P. de Bernardis, S. Colafrancesco, G. D'Alessandro, L. Lamagna, P. Marchegiani, S. Masi, A. Schillaci, "Low resolution spectroscopy of the Sunyaev-Zel'dovich effect and estimates of cluster parameters", *Astronomy & Astrophysics*, 538, id.A86 (2012), IF: 5.084
- 2 L. Lamagna, D. Bagliani, M. Biasotti, P. de Bernardis, R. Gualtieri, S. Masi, G. Pisano, "Multi-mode coupled focal planes for high precision measurements of large scale CMB polarization", *Proceedings of the 2013 International Conference on Electromagnetics in Advanced Applications, ICEAA 2013 PP. 1201-1204 (2013)*, IF: n/a
- 3 F. Sembolini, G. Yepes, M. De Petris, S. Gottloeber, L. Lamagna, B. Comis, "The MUSIC of galaxy clusters – I. Baryon properties and scaling relations of the thermal Sunyaev-Zel'dovich effect", *Monthly Notices of the Royal Astronomical Society*, 429, 323-343 (2013), IF: 5.226
- 4 F. Sembolini, M. De petris, G. Yepes, E. Foschi, L. Lamagna, S. Gottlöber, "The music of galaxy clusters - III. properties, evolution and Y-M scaling relation of protoclusters of galaxies", *Monthly Notices of the Royal Astronomical Society*, 440,3520-3531 (2014), IF: 5.107
- 5 G. Luzzi, R.T. Génova-Santos, C.J.A.P. Martins, M. De Petris, L. Lamagna,"Constraining the evolution of the CMB temperature with SZ measurements from Planck data", *Journal of Cosmology and Astroparticle Physics*, Issue 09, article id. 011, (2015), IF: 5.634

- 6 S. Legg, L. Lamagna, G. Coppi, P. de Bernardis, G. Giuliani, R. Gualtieri, T. Marchetti, S. Masi, G. Pisano, B. Maffei, "Development of the multi-mode horn-lens configuration for the LSPE-SWIPE B-mode experiment", Proc. SPIE 9914, Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy VIII (2016), IF: n/a
- 7 R. Gualtieri, E.S. Battistelli, A. Cruciani, P. de Bernardis, M. Biasotti, D. Corsini, F. Gatti, L. Lamagna, S. Masi, "Multi-mode TES Bolometer Optimization for the LSPE-SWIPE Instrument", Journal of Low Temperature Physics, Volume 184, Issue 3-4, pp. 527-533 (2016), IF: 1.300
- 8 A. S. Baldi, M. De Petris, F. Sembolini, G. Yepes, L. Lamagna, E. Rasia, "On the coherent rotation of diffuse matter in numerical simulations of clusters of galaxies", Monthly Notices of the Royal Astronomical Society, Volume 465, Issue 3, p.2584-2594 (2017), IF: 5.194
- 9 A.S. Baldi, M. De Petris, F. Sembolini, G. Yepes, W. Cui, L. Lamagna, "Kinetic Sunyaev-Zel'dovich effect in rotating galaxy clusters from MUSIC simulations", Monthly Notices of the Royal Astronomical Society, Volume 479, Issue 3, p.4028-4040 (2018), IF: 5.231
- 10 A. Paiella, A. Coppolecchia, L. Lamagna, P.A.R. Ade, E.S. Battistelli, M.G. Castellano, I. Colantoni, F. Columbro, G. D'Alessandro, P. de Bernardis, S. Gordon, S. Masi, P. Mauskopf, G. Pettinari, F. Piacentini, G. Pisano, G. Presta, C. Tucker, "Kinetic inductance detectors for the OLIMPO experiment: design and pre-flight characterization", Journal of Cosmology and Astroparticle Physics, Issue 01, article id. 039 (2019), IF: n/a
- 11 E.S. Battistelli, S. Fatigoni, M. Murgia, A. Buzzelli, E. Carretti, P. Castangia, R. Concu, A. Cruciani, P. de Bernardis, R. Genova-Santos, F. Govoni, F. Guidi, L. Lamagna, G. Luzzi, S. Masi, A. Melis, R. Paladini, F. Piacentini, S. Poppi, F. Radiconi, R. Rebolo, J.A. Rubino-Martin, A. Tarchi, "Strong Evidence of Anomalous Microwave Emission from the Flux Density Spectrum of M31", The Astrophysical Journal Letters, Volume 877, Issue 2, article id. L31, 7 pp. (2019), IF: n/a - [Link to Press Release \(Sapienza, Jun 18, 2019\)](#)
- 12 S. Masi, P. de Bernardis, A. Paiella, F. Piacentini, L. Lamagna, A. Coppolecchia, P.A.R. Ade, E.S. Battistelli, M.G. Castellano, I. Colantoni, F. Columbro, G. D'Alessandro, M. De Petris, S. Gordon, C. Magneville, P. Mauskopf, G. Pettinari, G. Pisano, G. Polenta, G. Presta, E. Tommasi, C. Tucker, V. Vdovin, A. Volpe, D. Yvon, "Kinetic Inductance Detectors for the OLIMPO experiment: in-flight operation and performance", Journal of Cosmology and Astroparticle Physics, Issue 07, article id. 003 (2019), IF: n/a

FULL LIST OF PUBLICATIONS

- 2000-2003 M. De Petris, F. Melchiorri, P. de Bernardis, A. De Micco, L. Lamagna, S. Masi, A. Orlando, G. Pisano, F. Romano, G. Siringo, S. Colafrancesco, Y. Rephaeli, M. Signore, E. Kreysa, "MITO: A 2.6-m mm/sub-mm ground based telescope", Proceedings of the Workshop on Astronomy and Astrophysics at Sub Millimeter Wavelengths, Rome, 03/20/2000, ISBN 88-7794-222-3 (2000), IF: n/a
- A. Orlando, M. De Petris, L. D'Alba, L. Lamagna, F. Melchiorri, Y. Rephaeli, S. Colafrancesco, M. Signore, E. Kreysa, C. Castagnoli, "Search for the Sunyaev-Zeldovich effect in the coma cluster with the MITO experiment", AIP Conference Proceedings, vol. 555, p.116-125 (2001), IF: n/a
- L. D'Alba, F. Melchiorri, M. De Petris, A. Orlando, L. Lamagna, Y. Rephaeli, S. Colafrancesco, M. Signore, E. Kreysa, C. Castagnoli, "The Sunyaev-Zeldovich MITO Project", proceedings della scuola "Understanding the Universe at the Close of the 20th Century", 25 aprile - 6 maggio 2000, Cargese, New Astronomy Reviews 45, 329-335 (2001), IF: n/a

M. De Petris, F. Melchiorri, A. Orlando, L. Lamagna, L. D'Alba, S. Colafrancesco, Y. Rephaeli, M. Signore, E. Kreysa, C. Castagnoli, A. Romero, P. Vernetto, P. Vallania, O. Saavedra, "Millimetric observations with a high-altitude 2.6m ground-based telescope", *Il Nuovo Cimento C*, vol. 24, issue 0405, pag. 651 (2001), IF: 0.234

L. Lamagna, M. De Petris, F. Melchiorri, E. Battistelli, M. De Grazia, G. Luzzi, A. Orlando, G. Savini, "MAD-4-MITO, a Multi-Array of Detectors for ground-based mm/submm SZ observations", *Proceedings of the 2k1BC Workshop "Experimental cosmology at millimetre wavelengths"*, Cervinia, Italy, July 9-14 2001, pubblicati in *AIP Conference Proceedings Series*, vol 616, pagg. 92-96 (2002), IF: n/a

M. De Petris, L. D'Alba, L. Lamagna, F. Melchiorri, A. Orlando, E. Palladino, Y. Rephaeli, S. Colafrancesco, E. Kreysa, M. Signore, "MITO Measurements of the Sunyaev-Zel'dovich effect in the Coma cluster of galaxies", *The Astrophysical Journal*, 574, L119-L122 (2002), IF: 6.187

E.S. Battistelli, M. De Petris, L. Lamagna, F. Melchiorri, E. Palladino, G. Savini, A. Cooray, A. Melchiorri, Y. Rephaeli, M. Shimon, "Cosmic microwave background temperature at galaxy clusters", *The Astrophysical Journal*, 580, L101-L104 (2002), IF: 6.187

L. Lamagna, M. De Petris, L. D'Alba, A. Orlando, G. Savini, F. Melchiorri, Y. Rephaeli, S. Colafrancesco, M. Signore, E. Kreysa, C. Castagnoli, "Mito Measurements of the S-Z Effect in the Coma Cluster", *Proceedings of the Ninth Marcel Grossman Meeting, held 2-8 July 2000 in The University of Rome "La Sapienza", Italy*. Edited by V. G. Gurzadyan, R. T. Jantzen, R. Ruffini. Published by World Scientific Publishing Co. Pte. Ltd. ISBN 9789812777386 (2002), IF: n/a

S. Masi, P.A.R. Ade, P. de Bernardis, A. Boscaleri, M. De Petris, G. De Troia, M. Fabriani, M. Giacometti, A. Iacoangeli, L. Lamagna, A. Lange, P. Lubin, P. Matuszkowicz, A. Melchiorri, F. Nati, L. Nati, A. Orlando, E. Pascale, F. Piacentini, M. Pierre, G. Polenta, Y. Rephaeli, G. Romeo, D. Yvon, "OLIMPO: a few arcmin resolution survey of the sky at mm and sub-mm wavelengths", *Memorie della Società Astronomica Italiana*, v.74, p.96 (2003), IF: n/a

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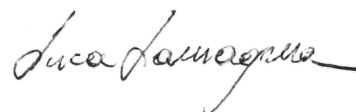
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DICHIARAZIONI

Le informazioni contenute nel presente *Curriculum vitae et studiorum* sono rese sotto la personale responsabilità del sottoscritto ai sensi degli artt. 46 e 47 del D.P.R. 28 dicembre 2000 n. 445, consapevole della responsabilità penale prevista dall'art. 76 del medesimo D.P.R., per le ipotesi di falsità in atti e dichiarazioni mendaci.

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