

CURRICULUM VITAE ET STUDIORUM DI MARIA PRINCIPE, PH.D.

Dati Personali

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Curriculum Vitae et Studiorum

Maria Principe consegue la Laurea in Ingegneria delle Telecomunicazioni con lode e menzione d'onore nel novembre 2004 e la Laurea Specialistica con lode e menzione d'onore nel dicembre 2006 presso l'Università degli Studi del Sannio in Benevento.

Nel 2005 Ella vince una *Summer Undergraduate Research Fellowship* (SURF) presso il *California Institute of Technology* (CALTECH) in Pasadena (CA), USA.

Nel 2006 Ella vince una borsa di studio INFN per laureandi, che spende presso i Laboratori Nazionali di Legnaro (LNL), in Legnaro (PD), Italia.

Nel 2009 M. Principe vince la prestigiosa *Fulbright fellowship* per *Visiting Student Researcher* e trascorre 6 mesi presso il *Center for Gravitational Wave Astronomy*, dell'Università del Texas in Brownsville (TX), USA.

Nel Luglio 2010 M. Principe riceve il titolo di Dottore di Ricerca in Ingegneria dell'Informazione col miglior giudizio (eccellente) con una tesi nel settore della fisica sperimentale dal titolo "Noise Modeling and Reduction of Gravitational Wave Detection Experiments".

Nell'ottobre 2010 M. Principe ottiene un assegno Post-Dottorato di durata annuale presso l'Università del Sannio.

Dal 2011 al 2013 Ella lavora nel settore R&D di due grandi aziende, ovvero *AgustaWestland* (da luglio a settembre 2011), e *Micron Semiconductor* (da settembre 2011 a luglio 2013).

Nel novembre 2013 Ella risulta vincitrice di un assegno di ricerca di durata annuale presso l'Università del Sannio.

Dal novembre 2014 al dicembre 2016 M. Principe è collaboratrice di ricerca presso il CeRICT (Centro Regionale Information Communication Technology) in Benevento.

Dall'ottobre 2017 al settembre 2018 Ella è assegnista di ricerca presso il Dipartimento di Fisica "E.R. Caianiello" dell'Università di Salerno.

Dal 2015 è professore incaricato esterno nel settore FIS/01 presso l'Università Giustino Fortunato.

Dall'Ottobre 2018 al Luglio 2019 è L'OREAL-UNESCO research fellow presso il Centro Studi e Ricerche Enrico Fermi.

Da Gennaio 2020 è collaboratrice di ricerca presso il CeRICT (Centro Regionale Information Communication Technology) in Benevento.

Per l'a.a. 2018/19 è professore incaricato esterno del corso di Fisica Sperimentale (FIS/01) presso il Dipartimento di Scienze e Tecnologie dell'Università del Sannio. Per l'a.a. 2019/20 è professore incaricato esterno del corso di Tutorato di Fisica (FIS/01) presso il Dipartimento di Scienze e Tecnologie dell'Università del Sannio.

Le sue attuali attività principali di ricerca sono: studio, ottimizzazione e fabbricazione di materiali compositi per *coating* ad alta riflettività e basso rumore termico per esperimenti ad alta precisione (come i rivelatori interferometrici di onde gravitazionali); studio e sviluppo di meta-materiali e meta-superfici per applicazioni ottiche e fotoniche.

M. Principe è autrice di 168 *peer-reviewed* articoli in Riviste internazionali ad alto fattore d'impatto, 3 capitoli di libro, diversi rapporti tecnici LIGO e di diversi lavori presentati a conferenze nazionali e internazionali.

Premi e Riconoscimenti nazionali ed internazionali

- 2019 - Vincitore della procedura concorsuale per 1 posizione da professore associato in Fisica Sperimentale della Materia presso l'Università Giustino Fortunato;
- 2018 - Premio L'ORÉAL-UNESCO "PER LE DONNE E LA SCIENZA";

- 2018 - Conseguimento dell'Abilitazione Scientifica Nazionale alle funzioni di professore di seconda fascia nel settore concorsuale 02/B1 (FIS/01) – Fisica Sperimentale della Materia, (30/3/2018 – 30/3/2024);
- 2018 - Vincitore della procedura concorsuale per 1 posizione da ricercatore di tipo a presso la Universitas Mercatorum (SSD FIS/01);
- 2016 - Special Breakthrough Prize in Fundamental Physics per la prima rivelazione diretta di onde gravitazionali;
- 2016 - Gruber Cosmology Prize (<http://gruber.yale.edu/prize/2016-gruber-cosmology-prize>) per la prima rivelazione di onde gravitazionali;
- 2011 – Menzione d'onore per le migliori tesi di dottorato del 2010 conferita dal *Gravitational Wave International Committee (GWIC Thesis Prize)*;
- 2009-2010 - *Fulbright Fellowship* (primo posto nella graduatoria nazionale) come *Visiting Student Researcher* presso l'Università del Texas;
- 2008 - Menzione per le migliori comunicazioni presentate durante il Congresso Nazionale della Società Italiana di Fisica, Genova (2008);
- 2006 – borsa di studio INFN per laureandi presso i Laboratori Nazionali di Legnaro (LNL) dell'INFN, in Legnaro (PD), Italia.
- 2005 - *Summer Undergraduate Research Fellowship* presso il *California Institute of Technology*, Pasadena CA, USA.

Partecipazione a progetti di ricerca

M. Principe partecipa o ha partecipato ai seguenti progetti di ricerca all'interno di collaborazioni nazionali ed internazionali:

- 2017-*in corso*, Virgo Coating R&D, in qualità di membro della Sezione INFN di Napoli Gruppo Collegato di Salerno e coordinatore del *CoatingLab* presso l'Università del Sannio;
- 2015 MIUR-PRIN 20155ACHBN-“Lab-on-fiber Technology For advanced optical nanoprobes”, in qualità di responsabile del Work Project 2: sviluppo di meta-superfici per applicazioni sensoristiche;
- 2014-2016, AdCOAT (Coating Avanzati Ottimizzati per l'Abbattimento del rumore Termico), INFN Commissione-V, in qualità di membro dell'unità di ricerca;
- 2007-2009, COAT (Coating Ottimizzati per l'Abbattimento del rumore Termico), INFN Commissione-V, in qualità di membro dell'unità di ricerca;
- 2008 MIUR-PRIN “2008_2J7FBN”, in qualità di membro dell'unità di ricerca;

- 2010-2011, “MIDI-BRUT” (Miscela Dielettriche a Basso Rumore Termico), INFN Commissione -V, in qualità di membro dell’unità di ricerca;
- LIGO-Virgo Collaboration (precedentemente *LIGO Scientific Collaboration*) dal 2005 e KAGRA Collaboration dal 2012.

Attività didattica

- Corso di Tutorato di Fisica (50 ore – SSD FIS/01) presso il Corso di Studi in Scienze Biologiche dell’Università degli Studi del Sannio, a.a. 2019/2020;
- Corso di Fisica Sperimentale (9 CFU – SSD FIS/01) presso il Corso di Studi in Scienze Geologiche dell’Università degli Studi del Sannio, a.a. 2018/2019;
- Corso di Fisica (6 CFU – SSD FIS/01) presso il Corso di Studi in Scienze e Tecnologie del Trasporto Aereo dell’Università degli Studi Giustino Fortunato, a.a. 2015/2016;
- Corso di Fisica (12 CFU – SSD FIS/01), Elementi di Fisica (6 CFU – SSD FIS/01) presso il Corso di Studi in Scienze e Tecnologie del Trasporto Aereo dell’Università degli Studi Giustino Fortunato, a.a. 2016/2017;
- Corso di Fisica (12 CFU – SSD FIS/01), Elementi di Fisica (6 CFU – SSD FIS/01), Teoria dei flussi (7 CFU – SSD FIS/01) presso l’Università degli Studi Giustino Fortunato, a.a.: 2017/2018, 2018/2019 e 2019/2020.
- Co-Tutor di Wendy Trattner nell’ambito del “MIT Independent Activity Program 2018” presso l’Università del Sannio per il progetto “Study of Dielectric Mirror Coatings in Advanced LIGO and Virgo Gravitational Wave Detectors”;
- Co-Tutor di Joshua Neilson, studente del Dottorato di Ricerca In Tecnologie dell’Informazione per l’Ingegneria, XXXIII ciclo, Università del Sannio

Affiliazioni

- INFN (Istituto Nazionale di Fisica Nucleare), dal 2014
- SIF (Società Italiana di Fisica), dal 2008
- SIEM (Società Italiana di Elettromagnetismo), dal 2008

Attività professionale

- Revisore per *The Carnegie Trust for the Universities of Scotland* per l’assegnazione di grant per *Early Career Researchers*, Novembre 2019

- Membro del comitato editoriale della Rivista Scientifica peer-reviewed *Materials* (ISSN 1996-1944; CODEN: MATEG9, IF 2.467) pubblicata online da MDPI (<https://www.mdpi.com/journal/materials>)
- Chair e organizzatore della Special Session “Optical Coatings for Extreme Metrology” durante il XXXXI *Photonics & Electromagnetics Research Symposium*, PIERS 2019, 17-20 Giugno, Roma;
- Chair e organizzatore della Special Session “Advances in GW Signal Processing and Data Analysis” durante la XXVI *European Signal Processing Conference*, EUSIPCO 2018, 3-7 Settembre;
- Guest Editor della Special collection 2018 “Recent Advances and Trends in Optical Metamaterials and Metasurfaces” della Rivista *Nanomaterials and Nanotechnology Journal* (<http://journals.sagepub.com/page/nax/special-collections/call-for-papers/optical-metamaterials-and-metasurfaces>);
- Revisore scientifico, *Physical Review & Physical Review Letters*
- Revisore scientifico, *Advanced Optical Materials*
- Revisore scientifico, *Journal of Physics D: Applied Physics*
- Revisore scientifico, *Physics Letters A*
- Revisore scientifico, *Optics Express*
- Revisore scientifico, *Nanophotonics*
- Revisore scientifico, *IEEE Transactions on Antennas and Propagation*
- Revisore scientifico, *IET Microwaves, Antennas & Propagation*
- Revisore scientifico, *International Journal of Antennas and Propagation*
- Revisore scientifico, *Materials Research*
- Revisore scientifico, *Advanced Materials*
- Revisore scientifico, *IEEE AP-S/URSI Symposium 2016, 2017, 2018*

Attività di terza missione

- Relatore alla *Notte Europea dei Ricercatori 2018* per presentare il progetto " Meta-materiali per aumentare la sensibilità dei rivelatori Virgo e LIGO di Onde Gravitazionali " sponsorizzato da L'Oreal-UNESCO *For Women in Science*, 28 Settembre 2018;
- Ospite all’evento “Giovani Donne sulla via della Scienza” ed intervista da parte della giornalista scientifica Mirella Orsi, Casa internazionale delle donne, Roma, 13 Settembre 2018;

- Lecturer in occasione della Summer School, “The beauty of the physics”, Università Giustino Fortunato, 26 Giugno 2018;
- Seminario “Physics is everywhere” in occasione dell’Open-day presso l’Università Giustino Fortunato, 10 March 2018;
- Seminario “A. Einstein e la relatività generale” nel contesto dell’attività di orientamento presso la scuola superiore ITTL Fond VILLAGGIO DEI RAGAZZI in Maddaloni (CE), 24 Gennaio 2018;
- Seminario “A. Einstein e la relatività generale” nel contesto dell’attività di orientamento presso la scuola superiore Istituto Tecnico Palmieri in Benevento, 27 Febbraio 2016;
- Intervista per il canale televisivo Julie Italia ad opera di Felice M De Falco, pubblicata anche in [julienews.it](http://www.julienews.it) (http://www.julienews.it/notizia/cyber-scienza-e-gossip/un-pezzo-di-campania-nella-scoperta-delle-onde-gravitazionali--video/361128_cyber-scienza-e-gossip_6.html);
- Cerimonia per l’annuncio della rivelazione di Onde Gravitazionali presso L’università del Sannio, 11 Febbraio 2016;
- Autrice di un blog – Physics for everyone – di divulgazione scientifica: mariaprincipe.webnode.it;
- Lecturer in Fisica durante il “Corso di perfezionamento ed aggiornamento professionale” in “Approccio agli studi matematico-statistici”, a. y. 2016/2017;
- Lecturer in occasione della Summer School, “The beauty of the physics”, Università Giustino Fortunato, Settembre 2017;
- Lecturer, “The Detection of Gravitational Waves,” Italian research excellence workshop, Finmeccanica meets Fulbright, Washington DC, USA, Marzo 2010.

Elenco delle pubblicazioni scientifiche

- P.1.** M. Consales, G. Quero, S. Spaziani, M. Principe, A. Micco, V. Galdi, A. Cutolo, A. Cusano, "Metasurface Enhanced Lab-on-Fiber Biosensors", *accepted for publication*.
- P.2.** V. Pierro, V. Fiumara, F. Chiadini, F. Bobba, G. Carapella, C.Di Giorgio, O. Durante, R. Fittipaldi, E. Mejuto Villa, J.Neilson, M. Principe, I. M. Pinto, “On the performance limits of coatings for gravitational wave detectors made of alternating layers of two materials,” *Optical Materials* 96 (2019) 109269
- P.3.** M Principe, M Consales, G Castaldi, V Galdi, A Cusano, “Evaluation of Fiber-Optic Phase-gradient Meta-tips for Sensing Applications,” *Nanomat Nanotech* 9 (2019) 1.

- P.4.** M Magnozzi et al., “Optical properties of amorphous SiO₂-TiO₂ multi-nanolayered coatings for 1064-nm mirror technology,” *Optical Materials* 75 (2018) 94.
- P.5.** L Glover et al, “A multi-step approach to assessing ligo test mass coatings,” 2018 *Journal of Physics: Conference Series* 957 (2018) 012010.
- P.6.** L Glover, M Goff, J Patel, I M Pinto, M Principe, T Sadecki, R Savage, E Villarama, E Arriaga, E Barragan, R DeSalvo, E Do, C Fajardo, “Optical scattering measurements and implications on thermal noise in Gravitational Wave detectors test-mass coatings,” *Phys. Lett. A* 382 (2018) 2259–226.
- P.7.** M. Principe and I.M. Pinto, “Locally Optimum Network Detectors of Unmodeled Gravitational Wave Bursts in Glitch Noise,” *Phys. Rev. D* 95 (2017) 082006.
- P.8.** M. Principe et al., “Optical fiber meta-tips”, *Light: Science & Applications* 6 (2017) e16226.
- P.9.** M. Principe et al., “Optical fiber meta-tips: perspectives in sensing applications,” *Proc. SPIE* 10323, 25th International Conference on Optical Fiber Sensors, 103233F (April 23, 2017); doi:10.1117/12.2265002.
- P.10.** S. Chao, H. Pan, L. Kuo, V. Pierro, M. Principe, I. Pinto, and R. DeSalvo, "nm-Layered Glassy Oxide Composites for 3rd Generation Interferometric Gravitational Wave Detectors," in *Optical Interference Coatings 2016*, OSA Technical Digest (online) (Optical Society of America, 2016), paper MB.10.
- P.11.** Maria Principe, Alberto Micco, Alessio Crescitelli, Giuseppe Castaldi, Marco Consales, Emanuela Esposito, Vera La Ferrara, Vincenzo Galdi, Andrea Cusano, “Optical fiber meta-tips,” *Proc. SPIE* 9883, *Metamaterials X*, 98831E (April 18, 2016); doi:10.1117/12.2227337
- P.12.** M. Principe, M. Consales, A. Micco, A. Crescitelli, G. Castaldi, et al." Meta-tips for lab-on-fiber optodes ", *Proc. SPIE* 9916, *Sixth European Workshop on Optical Fibre Sensors*, 99161V (May 30, 2016); doi:10.1117/12.2236316; <http://dx.doi.org/10.1117/12.2236316>
- P.13.** M. Principe et al., “Optical Fiber Meta-Tips,” *Asia Pacific Optical Sensors Conference*, 2016; DOI: 10.1364/apos.2016.th4a.58
- P.14.** M. Principe, “Reflective Coating Optimization for Interferometric Detectors of Gravitational Waves,” *Optics Express* Vol. 23, Iss. 9, pp. 10938–10956 (2015).
- P.15.** M. Principe, G. Castaldi, M. Consales, A. Cusano, V. Galdi, “Supersymmetry-Inspired Non-Hermitian Optical Couplers,” *Sci. Rep.* 5 (2015) 8568; DOI:10.1038/srep08568(2015).
- P.16.** M. Principe et al. “Material Loss Angles from Direct Measurements of Broadband Thermal Noise,” *Phys. Rev. D* 91 (2015) 022005.
- P.17.** H. Pan, S. Wang, L. Kuo, S. Chao, M. Principe, I.M. Pinto, and R. DeSalvo, “Thickness-dependent crystallization on thermal anneal for Titania/Silica nm-layer composites deposited by ion beam sputter method,” *Optics Express* 22 (2014) 29847-29854.
- P.18.** P. Adesso, M Longo, S Marano, I M Pinto, M Principe, “Sparsifying time-frequency distributions for gravitational wave data analysis,” 2015 3rd International Workshop on

Compressed Sensing Theory and its Applications to Radar, Sonar, and Remote Sensing, CoSeRa 2015,7330283, pp. 154-158

- P.19.** M. Principe, "Minimum noise optical coatings for interferometric detectors of gravitational waves," *2014 IEEE Metrology for Aerospace (MetroAeroSpace)*, Benevento, 2014, pp. 473-478. doi: 10.1109/MetroAeroSpace.2014.6865971
- P.20.** R P Croce, V Pierro, F Postiglione, M Principe, I M Pinto, "Robust gravitational wave burst detection and source localization in a network of interferometers using cross-Wigner spectra," *Class. Quantum Grav.* 29 (2012) 045001.
- P.21.** A E Villar, E D Black, R DeSalvo, K Libbrecht, C Michel, N Morgado, L Pinard, I M Pinto, V Pierro, V Galdi, M Principe e I Taurasi, "Measurements of Thermal Noise in multilayer coatings with optimized layer thickness," *Phys. Rev. D* 81 (2010) 122001.
- P.22.** M Principe and I M Pinto, "Detecting unmodeled GW bursts in non-Gaussian (glitchy) noise: two locally optimum network detectors", *Class. Quantum Grav.* 26 (2009) 204001.
- P.23.** M Principe and I M Pinto, "Locally optimum network detection of unmodeled gravitational wave bursts in an impulsive noise background", *Class. Quantum Grav.* 26 (2009) 045003.
- P.24.** M Principe and I M Pinto, "Modeling the impulsive noise component and its effect on the operation of a simple coherent network algorithm for detecting unmodeled gravitational wave bursts", *Class. Quantum Grav.* 25 (2008) 075013.

Pubblicazioni co-firmate dalla LIGO-Virgo Collaboration

- P.25.** M Principe and LVC Collaboration, "GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object," *Astrophys. J Lett* 896 (2020) L44.
- P.26.** M Principe and LVC Collaboration, "GW190425: Observation of a compact binary coalescence with total mass ~ 3.4 Msun," *Astrophys. J Lett* 892 (2020) L3.
- P.27.** M Principe and LVC Collaboration, "A joint Fermi-GBM and LIGO/Virgo analysis of compact binary mergers from the first and second gravitational-wave observing runs," *Astrophys. J* 893 (2020) 100.
- P.28.** M Principe and LVC Collaboration, "Optically targeted search for gravitational waves emitted by core-collapse supernovae during the first and second observing runs of Advanced LIGO and Advanced Virgo," *Phys Rev D* 101 (2020) 084002.
- P.29.** M Principe and LVC Collaboration, "Model comparison from LIGO-Virgo data on GW170817's binary components and consequences for the merger remnant," *Class Quantum Grav* 37 (2020) 045006.
- P.30.** M Principe and LVC Collaboration, "Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs," *Astrophys. J* 883 (2019) 149.

- P.31.** M Principe and LVC and IPN Collaborations, “Search for gravitational wave signals associated with gamma-ray bursts during the second observing run of Advanced LIGO and Advanced Virgo,” *Astrophys. J* 886 (2019) 75.
- P.32.** M Principe and LVC Collaboration, “Search for intermediate mass black hole binaries in the first and second observing runs of the Advanced LIGO and Virgo network,” *Phys Rev D* 100 (2019) 064064.
- P.33.** M Principe and LVC Collaboration and S Shandera, “Search for subsolar mass ultracompact binaries in Advanced LIGO's second observing run,” *Phys Rev Lett* 123 (2019) 161102.
- P.34.** V. Pierro, V. Fiumara, F. Chiadini, F. Bobba, G. Carapella, C.Di Giorgio, O. Durante, R. Fittipaldi, E. Mejuto Villa, J.Neilson, M. Principe, I. M. Pinto, “On the performance limits of coatings for gravitational wave detectors made of alternating layers of two materials,” *Optical Materials* 96 (2019) 109269.
- P.35.** M Principe and LVC Collaboration, “All-sky search for short gravitational-wave bursts in the second Advanced LIGO and Advanced Virgo run,” *Phys. Rev. D* 100 (2019) 024017.
- P.36.** M Principe and LVC Collaboration, “All-sky search for long-duration gravitational wave transients in the second Advanced LIGO observing run,” *Phys. Rev. D* 99 (2019) 104033.
- P.37.** M Principe and LVC Collaboration, “Tests of General Relativity with GW170817,” *Phys. Rev. Lett.* 123 (2019) 011102.
- P.38.** M Principe and LVC Collaboration, “Search for gravitational waves from a long-lived remnant of the binary neutron star merger GW170817,” *Astrophys. J.* 875 (2019) 160.
- P.39.** M Principe and LVC Collaboration, “A Fermi Gamma-ray Burst Monitor search for electromagnetic signals coincident with gravitational-wave candidates in Advanced LIGO's first observing run,” *Astrophys. J.* 871 (2019) 90.
- P.40.** M Principe and LVC Collaboration, “Constraining the p-mode--g-mode tidal instability with GW170817,” *Phys. Rev. Lett.* 122 (2019) 061104.
- P.41.** M Principe, M Consales, G Castaldi, V Galdi, A Cusano, “Evaluation of Fiber-Optic Phase-gradient Meta-tips for Sensing Applications,” *Nanomat Nanotech* 9 (2019) 1.
- P.42.** M Principe and LVC Collaboration, “Properties of the binary neutron star merger GW170817,” *Phys. Rev. X* 9 (2019) 011001.
- P.43.** M Principe and ANTARES, IceCube, LVC Collaborations, “Search for multimessenger sources of gravitational waves and high-energy neutrinos with Advanced LIGO during its first observing run, ANTARES, and IceCube,” *Astrophys. J.* 870 (2018) 134.
- P.44.** M Principe and LVC collaboration and S. Shandera, “Search for sub-solar mass ultracompact binaries in Advanced LIGO's first observing run,” *Phys. Rev. Lett.* 121 (2018) 231103.
- P.45.** M Principe and LVC collaboration , “GW170817: Measurements of neutron star radii and the equation of state,” *Phys. Rev. Lett.* 121 (2018) 161101.

- P.46.** M Principe and the LIGO-Virgo and Kagra Collaboration, “Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA,” *Living Rev Relativ* 21 (2018) 3
- P.47.** M Principe and LVC, “Effects of data quality vetoes on a search for compact binary coalescences in Advanced LIGO’s first observing run,” *Class Quantum Grav* 35 (2018) 065010.
- P.48.** M Principe and the LVC, “First Search for Nontensorial Gravitational Waves from Known Pulsars,” *Phys Rev Lett* 120 (2018) 031104;
- P.49.** M Principe and the LVC, “GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences,” *Phys Rev Lett* 120 (2018) 091101;
- P.50.** M Principe and the LVC, “All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run,” *Class Quantum Grav* 35 (2018) 065009.
- P.51.** M Principe and the LVC, “Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background,” *Phys Rev Lett* 120 (2018) 201102.
- P.52.** M Principe and the LVC, “Full band all-sky search for periodic gravitational waves in the O1 LIGO data,” *Phys Rev D* 97 (2018) 102003
- P.53.** M Principe and the LVC, “Constraints on cosmic strings using data from the first Advanced LIGO observing run,” *Phys Rev D* 97 (2018) 102002.
- P.54.** M Principe and LSC Instruments Authors, “Identification and mitigation of narrow spectral artifacts that degrade searches for persistent gravitational waves in the first two observing runs of Advanced LIGO,” *Phys Rev D* 97 (2018) 082002
- P.55.** M Principe and the LVC, “GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2,” *Phys Rev Lett* 118 (2017) 221101.
- P.56.** M Principe and the LVC, “Search for intermediate mass black hole binaries in the first observing run of Advanced LIGO,” *Phys Rev D* 96 (2017) 022001.
- P.57.** M Principe and the LVC, “Search for gravitational waves from Scorpius X-1 in the first Advanced LIGO observing run with a hidden Markov model,” *Phys Rev D* 95 (2017) 122003;
- P.58.** M Principe and the LVC, “First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data,” *Phys Rev D* 96 (2017) 122006;
- P.59.** M Principe and the LVC, “Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817,” *Astrophys J* 850 (2017) L39;
- P.60.** M Principe and the LVC, “On the Progenitor of Binary Neutron Star Merger GW170817,” *Astrophys J* 850 (2017) L40;
- P.61.** M Principe and the LVC, “Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory,” *The Astrophys J Lett* 850 (2017) L35;

- P.62.** M Principe and the LVC, “Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817,” *The Astrophys J Lett* 851 (2017) L16;
- P.63.** M Principe and the LVC, “GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence,” *The Astrophys J Lett* 851 (2017) L35;
- P.64.** M Principe and the LVC, “First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data,” *Phys Rev D* 96 (2017) 122004;
- P.65.** M Principe and the LVC, “Search for high-energy neutrinos from gravitational wave event GW151226 and candidate LVT151012 with ANTARES and IceCube,” *Phys Rev D* 96 (2017) 022005.
- P.66.** M Principe and the LVC, “First Search for Gravitational Waves from Known Pulsars with Advanced LIGO,” *Astrophys. J.* 839 (2017) 1.
- P.67.** M Principe and the LVC, “Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B,” *Astrophys. J.* 841 (2017) 2.
- P.68.** M Principe and the LVC, “Search for continuous gravitational waves from neutron stars in globular cluster NGC 6544,” *Phys Rev D* 95 (2017) 082005.
- P.69.** M Principe and the LVC, “Calibration of the Advanced LIGO detectors for the discovery of the binary black-hole merger GW150914,” *Phys Rev D* 95 (2017) 062003.
- P.70.** M Principe and the LVC, “All-sky search for short gravitational-wave bursts in the first Advanced LIGO run,” *Phys Rev D* 95 (2017) 042003.
- P.71.** M Principe and the LVC, “Effects of waveform model systematics on the interpretation of GW150914,” *Class. Quantum Grav.* 34 (2017) 104002.
- P.72.** M Principe and the LVC, “Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO’s First Observing Run,” *Phys Rev Lett* 118 (2017) 121101.
- P.73.** M Principe and the LVC, “Directional Limits on Persistent Gravitational Waves from Advanced LIGO’s First Observing Run,” *Phys Rev Lett* 118 (2017) 121102.
- P.74.** M Principe and the LVC, “Exploring the sensitivity of next generation gravitational wave detectors,” *Class. Quantum Grav.* 34 (2017) 044001.
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- C.42. M Principe et al., “Optical Fiber Meta-Tips as a New Platform for Local Light Manipulation,” Riunione GE2016 - June 22-24, 2016 - University of Brescia
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- C.50.** M Principe, R Croce, A De Vita, V Galdi, V Pierro and I M Pinto, “Electromagnetic Reverberation Enclosures: a Chaos Based Approach”, Proc. XVII Riunione Nazionale di Elettromagnetismo (RiNEM), Sept. 15-19 2008, Lecce IT.

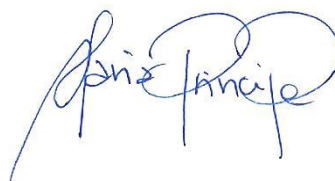
Ai sensi del D.P.R. n.445/2000, io sottoscritta PRINCIPE MARIA, nata a BENEVENTO (BN), il 19/11/1983, Codice Fiscale PRNMRA83S59A783W, residente in BENEVENTO (BN), via AVELLINO, n 22D, ed ivi domiciliata,

DICHIARO

che quanto riportato nel presente Curriculum Vitae et Studiorum corrisponde a verità e mi obbligo a provarlo quando codesto Dipartimento dovesse richiedermelo.

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base all'art. 13 del D. Lgs. 196/2003 e all'art. 13 GDPR 679/16.

Benevento, 29 Luglio 2020

A handwritten signature in blue ink, appearing to read 'Principe'.