

CURRICULUM VITAE

PERSONAL DATA

<i>name:</i>	Alberto Sesana	<i>languages:</i>	Italian (native)
<i>born:</i>	Lecco (IT), 7 August 1979		English (fluent)
<i>citizenship:</i>	Italian		German (basic)
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	20100, Milan, Italy	<i>e-mail:</i>	alberto.sesana@unimib.it

RESEARCH INTERESTS

- Gravitational waves: astrophysics and detection with laser interferometers and pulsar timing arrays.
- Massive black hole (binaries): formation, evolution, dynamics and observational signatures.
- Stellar dynamics, dense stellar systems.
- Hyper-velocity stars and the nature and environment of SgrA*.
- Gas dynamics and accretion theory.
- Structure formation and galaxy evolution.

EDUCATION

- Jan. 2007: **Università dell'Insubria** (Como, Italy): Doctor Philosophiae in Astrophysics.
 - Thesis: *Dynamics of massive black hole binaries in stellar environments*.
 - Advisor: Prof. Francesco Haardt (Università dell'Insubria).
 - Coadvisor: Prof. Piero Madau (University of California at Santa Cruz).
- 2003-2006: **Università dell'Insubria**: Ph.D. student in Physics & Astrophysics.
- Oct. 2003: **Università dell'Insubria**: B.S. Physics.
 - Specialization: theoretical physics (degree: *Dottore in Fisica Teorica*).
 - Final grade: 110/110 cum laude.
 - Thesis: *Il fondo cosmico di onde gravitazionali da sistemi binari di buchi neri supermassivi nel modello cosmologico gerarchico* (The cosmic gravitational wave background from coalescing massive black hole binaries in hierarchical cosmologies).
 - Advisor: Prof. Francesco Haardt (Università dell'Insubria).
 - Coadvisor: Prof. Vittorio Gorini (Università dell'Insubria).
- 1998-2003: **Università dell'Insubria**: Student in Physics.
- July 1998: **Liceo Scientifico G.B. Grassi** (Lecco, Italy): Scientific Diploma.
 - Final grade: 60/60.

APPOINTMENTS

- Apr. 2019 -present: **Università di Milano Bicocca** (Milan Italy): Associate professor, permanent appointment.
- May. 2017 -Mar. 2019: **University of Birmingham** (Birmingham UK): Senior Lecturer, permanent appointment.
- Jan. 2015 -present: **University of Birmingham** (Birmingham UK): University Research Fellow of the Royal Society.
- Jan. 2012 -Dec. 2014: **Albert Einstein Institute** (Golm, Germany): senior researcher on SFB contract.
- Nov. 2009-Dec. 2011: **Albert Einstein Institute** (Golm, Germany): postdoctoral researcher on MPG stipendium.
- Nov. 2007-Nov. 2009: **The Pennsylvania State University** (State College, PA): postdoctoral scholar.
- Feb. 2007-Oct. 2007: **University of Birmingham** (Birmingham, UK): postdoctoral researcher.

AWARDS

- **PO ASN**, Italian abilitation as Full Professor. Awarded December 2017.
- **PA ASN**, Italian abilitation as Associate Professor. Awarded April 2017.
- **University Research Fellow** of the Royal Society. Awarded May 2014.

FUNDING

- **ERC CoG "B Massive", PI**. Awarded November 2018. 1.6M EUR.
- **University of Birmingham STFC consolidated grant, co-I**. Awarded November 2016. 2.1M GBP.
- **University Research Fellow** of the Royal Society. Awarded May 2014. 480k GBP.

TEACHING

Undergraduate courses

- 2019-present: Lecturer: Relativistic Astrophysics, 4th year undergraduate class, Università di Milano Bicocca. Full module, 56 hours, ~30 students.
- 2019-present: Lecturer: Gravitational Waves, 4th year undergraduate class, Università di Milano Bicocca. Full module, 42 hours, ~30 students.
- 2017-2019 Lecturer: Introduction to Astronomy, 1st year undergraduate class, University of Birmingham. Full module, 20 hours, ~50 students.
- 2005-2006: Teaching assistant in *Analytical Mechanics* course for undergraduate students at Università dell'Insubria. 10 Lectures, 20 hours, ~20 students.
- 2004-2006: Teaching assistant in *Cosmology* course for undergraduate students at Università dell'Insubria. 10 hours, ~15 students.

Graduate courses and schools

- 2018: Lecturer at the school 'Gravitational Waves', series of lectures on 'LISA Science', 4 hours, ~50 students (expected). Les Houches, France.
- 2018: Lecturer at the school 'Waves on the Lake', series of lectures on low frequency gravitational wave sources, 4 1/2 hours, ~40 students. Como, Italy.
- 2017: Lecturer at the NewCompStar School 2017: 'Neutron stars: theory, observations and gravitational waves emission', series of lectures on pulsar timing, 4 hours, ~80 students. Sofia, Bulgaria.
- 2017: Lecturer at the 'School on Gravitational Waves for Cosmology and Astrophysics', series of lectures on 'black hole astrophysics', 6 hours, ~70 students. Benasque, Spain.
- 2017: Lecturer at the 'KEK Cosmo17 PhD school', series of lectures on 'astrophysics of gravitational wave sources', 6 hours, ~50 students. Tsukuba, Japan.
- 2015-2016: Lecture series '*Basic astrophysics of compact objects*', at the Albert Einstein Institute. 12 blackboard lectures of 90m each, 18 hours in total. 30 PhDs and postdocs attending in situ plus videolink to Hannover.
- 2011-2014 & 2018: Lecturer at the IMPRS Ph.D. School: International Max Planck Research School on Gravitational Wave Astronomy. Topic: formation and evolution of massive black holes, 4 hours each time, ~30 students every year.
- 2010 & 2013: Lecturer at the IPTA student weeks during the IPTA meetings. Topic: gravitational waves from massive black hole binaries, 3 hours, ~30 students every year.
- July 2009: Invited lecturer to the "4th summer school & workshop in gravitational wave astronomy", organized by the Center for Gravitational Wave Astronomy (University of Texas at Brownsville) and Nanjing University at the Yunnan University, Kunming, China, 8 hours, ~40 students .

STUDENT SUPERVISION AND CO-SUPERVISION

PhD students

To date, **I supervised 9 PhD students**, two still completing their studies. Of the seven that finished, one holds a position as assistant professor, three are on postdoctoral fellowships and three are fully employed outside academia.

- 2016-2020: Supervisor of Janna Goldstein, PhD student at the Univeristy of Birmingham.
- 2015-2018: Supervisor of Siyuan Chen, PhD student at the Univeristy of Birmingham.
- 2014-2018: Co-supervisor of Matteo Bonetti, PhD student at Univeristà dell'Insubria, under the supervision of Prof. Francesco Haardt. Now postdoc at Università dell'Insubria.
- 2014-2017: Co-supervisor of Hannah Middleton, PhD student at the Univeristy of Birmingham. Now postdoc at University of Melbourne.
- 2014-present: Co-supervisor of Felipe G. Goicovic, PhD student at the Universidad Catolica de Chile, Santiago, under the supervision of Prof. Jorge Cuadra. Now postdoc at Heidelberg University.
- 2012-2014: Co-supervisor of Pablo Rosado, PhD student at the Albert Einstein Institute, Hannover, under the supervision of Prof. Bruce Allen.
- 2009-2012: Supervisor of Constanze Roedig, PhD student at the Albert Einstein Institute, Golm. PhD award September 2012, magna cum laude.
- 2008-2009: Co-supervisor of Xian Chen, PhD student at the Peking University and at the University of California at Santa Cruz under the supervision of Prof. Fukun Liu and Prof. Piero Madau. Now assistant professor at Peking University.
- 2008-2009: Co-supervisor of Drew Clausen, PhD student at the Pennsylvania State University under the supervision of Prof. Mike Eracleous.

Master students

At University of Birmingham, as proleptic lecturer, **I supervised 10 master students** in their 4th year project. Nine of them finished with a solid 1st grade and one with a good 2a grade (respectively, the highest and second highest slots in the UK system grade progression). At Univesity of Milan I have completed the supervision of one master student (graduated cum laude) and I am undertaking the supervision of three more students.

SCIENTIFIC RESPONSIBILITIES HELD

I have been involved in the LISA, EPTA and IPTA collaborations for more than a decade, covering positions of responsibility at the highest level, including serving as Chair of the IPTA collaboration in 2016-2017.

- 2018-present: 'Key science' Working Package of the LISA Consortium: *Coordinator*.
- 2016-2017: International Pulsar Timing Array (IPTA): *Chair*.
- 2016-present: ISS-TAO science team member.
- 2016-present: TAP science team member.
- 2015-2018: Member of the European Pulsar Timing Array (EPTA) Executive Committee.
- 2013-2018: Member of the IPTA steering committee
- 2013-2017: EPTA theory and data analysis working group: *Chair*.
- 2013, 2017, 2018: EPTA delegate for GWIC.
- 2011-2018: 'Astrophysical Black Hole' working group of the eLISA Consortium: *Chair*.
- 2011-present: Member of the NGO/eLISA science team, proposing eLISA to ESA in the context of the L mission program.
- 2008-present: Member of the European Pulsar Timing Array (EPTA) and of the International Pulsar Timing Array (IPTA).

REFEREEING AND OTHER SERVICES

- Peer review referee for *The astrophysical Journal* (since 2006), *Monthly Notices of the Royal Astronomical Society* (since 2006), *Classical and Quantum Gravity* (since 2009), *Physics Review D/Letters* (since 2009), *Nature* (since 2012), *Science* (since 2013).
- Reviewer for the ERC advanced grant, 2018, 2020.
- COST action rapporteur, 2017-2018.
- Reviewer for the ERC starting grant, 2017,2019.
- Reviewer for the STFC fellowship scheme, 2017, 2020.
- Reviewer for NASA ATP proposal scheme, 2017.
- Reviewer for the Rita Levi Montalcini program, 2017.
- Reviewer for the Royal Society exchange scheme, 2107-2020.
- Reviewer of propoals within the Chilean FONDECYT scheme, 2016.
- Reviewer of 'DiRAC source allocation' proposals for the STFC, 2016.
- Reviewer of proposals within the 'VICI' scheme for the Netherlands, 2016.
- Reviewer for 'Progetti di Ricerca di Interesse Nazionale (PRIN)' for the italian minister of education (MIUR), 2015.
- External reviewer for the NSF Experimental Program to Stimulate Competitive Research (EP-SCoR), 2014.
- Reviewer for the Croatian Science Foundation proposals, 2012.

PUBLICATION RECORD

The results of my work are collected in a series of publications in the top international journals in the field:

- 132 total refereed papers since 2004.
- H index 49; > 10000 citations according to Google scholar, > 9000 citations according to NASA ADS (> 7700 citations excluding self-citations).
- 30+ first Author refereed papers since 2004; >2400 citation (ADS, excluding self-citations).
- 20+ papers led by supervised students since 2009; \approx 1000 citations (ADS).
- Leading contributor to the eLISA science case (3 papers, >800 citations according to ADS).
- Major contributor to the LISA proposal officially adopted by ESA.
- Contributor to the SKA German white paper.
- 3 book chapters and 4 invited reviews by Classical and Quantum Gravity and Advances in Astronomy.

10 PUBLICATIONS RELEVANT TO THE DFG PROPOSAL

- 1 R. Serafinelli, ..., **A. Sesana** et al., "Unveiling Sub-pc Supermassive Black Hole Binary Candidates in Active Galactic Nuclei", **ApJ**, **902**, **10** (2020).
- 2 A. De Rosa, ..., **A. Sesana**, "The quest for dual and binary supermassive black holes: A multi-messenger view" **NewAR**, **8601525** (2019).
- 3 L.Z. Kelley, Z. Haiman, **A. Sesana** & L. Hernquist, "Massive BH binaries as periodically variable AGN", **MNRAS**, **485**, **1579** (2019).
- 4 M.A. Holgado, **A. Sesana** et al. "Pulsar timing constraints on the Fermi massive black hole binary blazar population", **MNRAS**, **481**, **74** (2018).
- 5 A. Sandrinelli, S. Covino, A. Treves, A.M. Holgado, **A. Sesana**, E. Lindfors & V. Fallah Ramazani, "Quasi-periodicities of BL Lac Objects and Their Origin", **A&A**, **615**, **118** (2018).
- 6 **A. Sesana**, Z. Haiman, B. Kocsis & L.Z. Kelley "Testing the binary hypothesis: pulsar timing constraints on supermassive black hole binary candidates", **ApJ**, **856**, **42** (2018).
- 7 C.M.F. Mingarelli, T.J.W. Lazio, **A. Sesana** and others "The Local Nanohertz Gravitational-Wave Landscape From Supermassive Black Hole Binaries", **Nature Astronomy**, **1**, **886** (2018).

- 8 F.G. Goicovic, J. Cuadra, **A. Sesana**, F. Stasyszyn, P. Amaro-Seoane, T.L. Tanaka, "Infalling clouds onto super-massive black hole binaries - I. Formation of discs, accretion and gas dynamics", **MNRAS**, **455**, **1989** (2016).
- 9 P. Rosado & **A. Sesana**, "Targeting supermassive black hole binaries and gravitational wave sources for the pulsar timing array", **MNRAS**, **439**, **3986** (2014).
- 10 **A. Sesana**, C. Roedig, M. T. Reynolds & M. Dotti, "Multimessenger astronomy with pulsar timing and X-ray observations of massive black hole binaries", **MNRAS**, **420**, **860** (2012).

MEETINGS & CONFERENCES (SINCE 2008)

I have delivered more than 100 talks at meetings and conferences since 2004 (selected talk since 2008 are listed below), the majority of them as invited speaker, including plenary talks at prestigious meetings like the Amaldi Conference, the Texas Symposium and the LISA Symposium. Since 2012 I have been engaged in the organization of several meetings and symposia as SOC member.

Organized meetings

- 1 "Descending the slippery slope of the analysis and interpretation of multi-messenger data", to be held in Sexten, Italy, February 10-14 2020. Organizing Board.
- 2 "International Coordination of Multi-Messenger Transient Observations in the 2020's and Beyond", to be held in Cape Town, February 3-7 2020. SOC member.
- 3 "The New Faces of Black Holes", to be held in Annapolis, November 11-13 2019. SOC member.
- 4 "Gravast19: The New Era of Gravitational-Wave Physics and Astrophysics", 3-month KITP program, Santa Barbara, May-July 2019. Organizing Board.
- 5 "Enabling LISA Science Exploitation", Leiden, March 4-8 2019. Organizing board.
- 6 "Cosmic mergers: from massive black holes to massive clusters", Birmingham, September 21-22 2017. SOC and LOC member.
- 7 "The migration issue: from protoplanets to supermassive black holes", Cambridge, May 22-24 2017. SOC member.
- 8 "The transient and variable sky in the era of gravitational wave astronomy", Royal Society Workshop, Milton Keynes, October 26-27 2016. Main scientific and logistic organizer.
- 9 "11th LISA Symposium", Zurich, September 5-9 2016. SOC member.
- 10 "GRAMPA: GRavitational-wave Astronomy Meeting in PARIS", Paris, August 29-September 2 2016. SOC member.
- 11 "IPTA@South Africa", Cape Town, June 27-July 1 2016. SOC member.
- 12 "NAM 2016", Nottingham, June 27-July 1 2016. SOC member of the Gravitational Wave parallel section.
- 13 "IPTA@Blue Mountains", Blue Mountains, July 27-31 2015. SOC member.
- 14 "COSPAR-40, event E.1-20", Moscow, August 2-10 2014. SOC member.
- 15 "IPTA@BANFF", Banff, June 6-7 2014. SOC member.
- 16 "10th LISA Symposium", Gainesville, FL, May 18-24 2014. SOC member.
- 17 "Chile-MPG workshop on MBH binaries", Las Cruces, Chile, March 4-7 2014. Organizing Board.
- 18 "European pulsar timing array meeting", AEI Golm, November 5-9 2012. Official host and SOC member.

Invited speaker¹.

- 1 "Science of 3rd Generation Gravitational Wave Detectors", Berlin, October 22-23 2019.
- 2 "KICC 10th anniversary symposium", Cambridge, September 16-20 2019.
- 3 "X-ray astronomy 2019", Bologna, September 8-13 2019.
- 4 "1st LISA Astro WG meeting", Paris, December 12-14 2018.
- 5 "TeVPA 2018", Berlin, August 27-31 2018.
- 6 "XII International Workshop on the Interconnection between Particle Physics and Cosmology", Zurich, August 20-24 2018.

¹Several invitations, declined for time constraints, are not listed

- 7 "The early growth of supermassive black holes", Sesto val Pusteria, July 2-6 2018.
- 8 "The 14th International Workshop Dark Side Of the Universe", Annecy, June 25-29 2018.
- 9 LISA Consortium Meeting. Invited talk on 'Science highlights', Hannover, April 9-11 2018.
- 10 "The quest for multiple supermassive black holes", Leiden, November 20-24 2017.
- 11 "Stellar Dynamics in Galactic Nuclei", IAS Princeton, NJ, November 29 - December 1 2017.
- 12 "And then there was Light: Electromagnetic Signatures of Stellar Mass Binary Black Hole Mergers", Leiden, September 4-8 2017.
- 13 "Amaldi 12" (conference opening talk), Pasadena, July 10-14 2017.
- 14 "The Era of Gravitational-Wave Astronomy", IAP Paris, June 26-30 2017.
- 15 "New Frontiers in Gravitational-Wave Astrophysics", Rome, June 19-22 2017.
- 16 "Generation-GW: Diving into Gravitational Waves", US Virgin Islands, June 5-9 2017.
- 17 "2017 Rencontres de Moriond: Gravitation", la Thuile, March 27-31 2017.
- 18 "3rd LISA Cosmology workshop", DESY Hamburg, October 17-21 2016.
- 19 "Foundations of the Theory of Gravitational Waves", Nordita Stockholm, October 9-11 2016.
- 20 "11th LISA Symposium", Zurich, September 5-9 2016.
- 21 Opening speech at the "IPTA 2016 Science meeting", Stellenbosch, June 27- July 1 2016.
- 22 "9th Sackler Conference in Theoretical Astrophysics", Harvard, May 16-19 2016.
- 23 "6th Iberian Gravitational Wave Meeting", Madrid, April 11-13 2016.
- 24 ISSI workshop "High Performance Clocks", Bern, November 30-December 4 2015.
- 25 MIAPP workshop: "The Many Faces of Neutron Stars", Garching, August 31-September 11 2015.
- 26 "Pulsars and their environments", Orleans, May 11-13 2015.
- 27 "eLISA Cosmology Working Group Workshop", CERN, April 14-17 2015.
- 28 "Compact Objects as Astrophysical and Gravitational Probes", Lotentz Center, Leiden, February 2-6 2015.
- 29 AGN11: "Where Black Holes and Galaxies Meet", Trieste, September 23-26 2014.
- 30 "Spanish Relativity Meeting (ERE2014): almost 100 years after Einstein's revolution", Valencia, September 1-5 2014.
- 31 "IAU Symposium 312: Star Clusters and Black Holes in Galaxies across Cosmic Time", Beijing, August 25-29 2014.
- 32 Astro-GR@Rome, Osservatorio di Monteporzio, Rome, July 14-18 2014.
- 33 "Sant Cugat Forum on Astrophysics", Barcelona, April 22-25 2014.
- 34 "Progress on Old and New Themes in cosmology (PONT 2014)", Avignon, April 14-18 2014.
- 35 "223th AAS Meeting", Washington DC, January 5-9 2014.
- 36 "Gravitational wave physics & astronomy workshop (GWPAW)", Pune, December 17-20 2013.
- 37 Astro-GR@Atlanta: "Black Hole Growth in the Universe", Atlanta, November 18-22 2013.
- 38 "A Universe of BHs", Santa Barbara, August 5-9 2013.
- 39 "IPTA 2013 Science meeting", Krabi, June 24-28 2013.
- 40 "26th Texas Symposium" (plenary talk), Sao Paulo, December 15-20 2012.
- 41 Astro-GR@Beijing: "Black Hole Growth in the Universe", Beijing, September 3-7 2012.
- 42 "13th Marcel Grossmann Meeting", Stockholm, July 1-7 2012.
- 43 "IPTA 2012 Science meeting", Kiama, June 25-29 2012.
- 44 "9th LISA symposium" (plenary talk), Paris, May 21-25 2012.
- 45 Astro-GR@Mallorca: "Low-frequency gravitational-wave astrophysics", Palma, September 5-9 2011.
- 46 "Gravitational wave astrophysics, binary supermassive black holes, and galaxy mergers", Lijiang, August 1-5 2011.
- 47 "IPTA 2011 Science meeting", Snowshoe, June 13-17 2011.
- 48 "217th AAS Meeting", Seattle, January 9-13 2011.
- 49 "LISA astro-GR @ Paris", Paris, September 13-17 2010.
- 50 "IPTA 2010: Detecting Gravitational Waves with Pulsars", Leiden, June 28-July 2 2010.
- 51 "LISA France Meeting 2010", Paris, June 1-2 2010.
- 52 "Binaries in the Cosmic Landscape", Zurich, February 10-12 2010.
- 53 "Stars and Singularities", Rehovot, December 8-14 2009.
- 54 "Massive Black Hole Binaries and Their Coalescence in Galactic Nuclei", KIAA-PKU, Beijing, July 20-25, 2009.

- 55 "Observational Signatures of Black Hole Mergers", STScI, Baltimore, March 29-31, 2008.
- 56 "Black Hole Astrophysics with Radio and Gravitational Wave Observations", NRAO Headquarters, Charlottesville, November 7-8, 2008.
- 57 LISA 2W@AEI meeting: "Sources of gravitational waves from galactic centers", AEI, Golm, September 1-12, 2008.
- 58 7th LISA symposium, Barcelona, June 16-20, 2008.
- 59 LISA Astro-GR@Como: "Astrophysics of LISA gravitational wave sources", Como, February 6-8, 2008.

Other contributed talks

- 1 "12th LISA Symposium", Chicago, July 8-13 2018.
- 2 "28th Texas Symposium", Geneve, December 14-18 2015.
- 3 "IPTA 2015 Science meeting", Katoomba, July 27-31 2015.
- 4 Aspen summer workshop: "CSI PTA", Aspen, May 25-June 12 2015.
- 5 "The 40th COSPAR Scientific Assembly", Moscow, August 2-10 2014.
- 6 "Unsolved Problems in Astrophysics and Cosmology", Budapest, June 28-July 5 2014.
- 7 "Amaldi10/GR20", Warsaw, July 7-13 2013.
- 8 "Gravitational wave physics & astronomy workshop (GWPAW)", Hannover, June 4-7 2012.
- 9 "UK-Germany National Astronomy Meeting NAM2012", Manchester, March 27-30 2012.
- 10 AG Meeting: "A fresh view of the radio sky: science with LOFAR, SKA and its pathfinders", Heidelberg, September 20-22 2011.
- 11 285th IAU Symposium: "New horizons in time domain astronomy", Oxford, September 19-23 2011.
- 12 Aspen summer workshop: "Galaxy and central black hole coevolution", Aspen, May 23-June 10 2011.
- 13 "Multimessenger Emissions from Sources of Gravitational Waves", Sao Sebastiao, November 29-December 3 2010.
- 14 "460. Wilhelm and Else Heraeus Seminar: Black Holes", Bad Honnef, June 7-11 2010.
- 15 "SKA 2010 Science and Engineering meeting", Manchester, March 22-25 2010.
- 16 "14th Gravitational wave data analysis workshop (GWDAW14)", Rome. January 26-29 2010.
- 17 "Amaldi 8" (plenary talk), New York, June 21-25 2009.
- 18 "5th UC Irvine Center for Cosmology Workshop: Intermediate-Mass Black Holes: from First Light to Galactic Nuclei", Irvine, April 1-3 2009.
- 19 "13th Gravitational wave data analysis workshop (GWDAW13)", San Juan, January 19-22 2009.
- 20 Aspen summer workshop: "Gravitational wave astronomy", Aspen, May 25-June 13 2008.

INVITED COLLOQUIA AND SEMINARS (SINCE 2008)

- 1 Scuola Normale Superiore, Pisa, Italy, November 20 2019.
- 2 CCA, New York, USA, November 8 2019.
- 3 BHI Harvard, Cambridge, USA, November 5 2019.
- 4 Caltech, Pasadena, USA, July 12 2019.
- 5 NYU Abu Dhabi, Abu Dhabi, United Arab Emirates, February 13 2019.
- 6 Kings College, London, UK, February 6 2019.
- 7 Oxford University, Oxford, UK, February 1 2019.
- 8 DESY, Hamburg, Germany, January 30 2019.
- 9 University of Nottingham, Nottingham, UK, January 23 2019.
- 10 Peking University, Beijing, China, October 18 2018.
- 11 Peking Normal University, Beijing, China, October 16 2018.
- 12 NAOC, Beijing, China, October 11 2018.
- 13 University College London, London, UK, April 23 2018
- 14 Università di Milano Bicocca, Milan, Italy, March 22 2018.
- 15 Albert Einstein Institute, Potsdam, Germany, March 9 2018.
- 16 Stony Brook University, New York, USA, November 27 2017.
- 17 Peking University, Beijing, China, October 31 2017.
- 18 Shanghai University, Shanghai, China, October 26 2017.

- 19 Dublin University, Dublin, Ireland, October 11 2017.
- 20 Max Planck Institut fuer Astronomie (MPIA), Koenigstuhl Colloquium, Germany, April 21 2017.
- 21 Durham University, Durham, UK, February 8 2017.
- 22 IOP, London, UK, September 26 2016.
- 23 IAP, Paris, France, July 5 2016.
- 24 DARK, Copenhagen, Denmark, June 16 2016.
- 25 INAF Bologna, Bologna, Italy, April 21 2016.
- 26 University of Surrey, Guilford, UK, April 7 2016.
- 27 University of Southampton, Southampton, UK, February 11 2016.
- 28 Oxford University, Oxford, UK, February 4 2016.
- 29 University of Milano Statale, Milan, Italy, November 17 2015.
- 30 Rochester Institute of Technology, Rochester, NY, October 8 2015.
- 31 University of Njimegen, Njimegen, The Netherlands, February 17 2015.
- 32 Cardiff University, Cardiff, UK, March 28 2014.
- 33 Max Planck Institute fuer Astrophysik (MPA), Joint MPA-MPE-ESO colloquium, Garching, Germany, March 20 2014.
- 34 Universidad del Chile, Calan, Santiago, March 12 2014.
- 35 University of Potsdam, Potsdam, November 26 2013.
- 36 University of California at Santa Cruz, Santa Cruz, CA, August 2 2013.
- 37 University of Leiden, Leiden, March 1 2013.
- 38 Princeton, February 22 2013.
- 39 Columbia University, New York, February 20 2013.
- 40 New York University, New York, February 19 2013.
- 41 CFA Harvard, Cambridge, MA, February 14 2013.
- 42 Università di Milano Bicocca, January 15 2013.
- 43 Universidad Catolica del Chile, Santiago, December 13 2012.
- 44 University of West Virginia, November 28 2012.
- 45 IAP, Paris, France, October 15 2012.
- 46 ATNF, Sydney, Australia, June 21 2012.
- 47 Monash University, Melbourne , Australia, June 13 2012.
- 48 University of Wurzburg, Wurzburg, Germany, May 16 2012.
- 49 University of Bologna, Bologna, Italy, March 8 2012.
- 50 Orleans Univeristy, Orleans, France, October 18 2011.
- 51 Cardiff University, Cardiff, UK, September 15 2011.
- 52 Chinese Academy of Science, Beijing, China, August 10 2011.
- 53 APC, Paris, France, June 30 2011.
- 54 NASA Goddard Space Flight Center, Greenbelt, MD, June 17 2011.
- 55 Peking University, Beijing, China, March 14 2011.
- 56 University of Michigan, Ann Arbor, Michigan, January 13 2011.
- 57 APC, Paris, France, December 15 2010.
- 58 IAP, Paris, France, December 15 2010.
- 59 Institute for Astronomy, Cambridge, UK, March 24 2010.
- 60 University of Birmingham, Brimingham, UK, January 12 2010.
- 61 Max Planck Institute fur Astrophysik (MPA), Garching, Germany, November 20 2009.
- 62 University of Zurich, Zurich, Switzerland, November 18 2009.
- 63 Massachusetts Institute of Technology, Cambridge, MA, June 10, 2009.
- 64 Northwestern University, Evanston, IL, May 21, 2009.
- 65 University of California at Santa Cruz, Santa Cruz, CA, May 18, 2009.
- 66 California Institute of Technology, Pasadena, CA, May 12, 2009.
- 67 University of Sydney, Sydney, Australia, May 8, 2009.
- 68 Swinburne University, Melbourne, Australia, May 5, 2009.
- 69 University of Melbourne, Melbourne, Australia, May 4, 2009.
- 70 ATNF, Sydney, Australia, April 22, 2009.
- 71 Georgia Tech., Atlanta, GA, March 19, 2009.

- 72 NASA Goddard Space Flight Center, Greenbelt, MD, December 2, 2008.
 73 Albert Einstein Institute, Potsdam, Germany, July 7, 2008.
 74 University of California at Santa Cruz, Santa Cruz, CA, May 19, 2008.
 75 University of Maryland, College Park, MD, April 21, 2008.

OUTREACH

I've been involved in several outreach activities in the years including:

- Invited seminar at the British Astronomical Association. ~ 130 amateur astronomers.
- Astronomy in the city, public talks to 200 people, 2016-2017, Birmingham
- Seminars for local astronomical societies and high schools in the Birmingham area (2016-present), ~10 seminars, ~500 people from the general public involved.
- Astronomy for kids. Primary school Civenna (Italy), 50 kids (2016)
- Seminars on the first GW detection at Lecco high school (~100 students), Como University (~200 people), Galbiate city hall (~80 people) (2016)
- Seminars for middle and high school students (2005-2007), Osservatorio Astronomico di Brera, Italy
- Physics exhibition in the centenary of Special Relativity (2005-2006), Como, Italy
- Co-creator and tour guide to the exhibition 'Di Luce in Luce' (2001-2002) <http://www.diluceinluce.eu/>

ACADEMIC REFEREES

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