

CONTACT DETAILS	Igor Andreoni Division of Physics, Mathematics and Astronomy California Institute of Technology MC 249-17, 1200 E California Blvd, Pasadena, CA, USA Email: andreoni@caltech.edu
CURRENT POSITION	Postdoctoral Fellow
RESEARCH INTERESTS	Gravitational waves and multi-messenger astronomy Optical and high-energy transients Fast Radio Bursts
PROFESSIONAL MEMBERSHIPS	<ul style="list-style-type: none"> • 2018–ongoing: Member of the Global Relay of Observatories Watching Transients Happen (GROWTH) Collaboration • 2018–ongoing: Member of the American Astronomical Society (AAS) • 2018–ongoing: Member of the LSST Transients and Variable Stars Science Collaboration • 2017–2018: Member of the ARC Centre of Excellence for Gravitational Wave Discovery (OzGrav) • 2016–2018: Student sponsored by the Australian Astronomical Observatory (AAO) • 2015–2017: Member of the ARC Centre of Excellence for All-sky Astrophysics (CAASTRO)
EDUCATION	<ul style="list-style-type: none"> • 2015–2018: PhD in Astronomy at Swinburne University of Technology (Hawthorn, VIC, Australia). Thesis title: “<i>Deep multi-wavelength exploration of the fast transient Universe</i>”. Supervisors: A/Prof Jeff Cooke, Prof Matthew Bailes (Swinburne), Dr Stuart Ryder (AAO). • 2014: Master’s degree in Physics at Università degli Studi di Milano, Milan, Italy. Thesis title: “<i>Monitoring of nearby galaxies with the Swift satellite to search for variable sources.</i>” Supervisors: Dr Sergio Campana, Dr Paolo D’Avanzo (INAF-OAB), Prof Pierre Pizzochero (UniMi). • 2012: Bachelor’s degree in Physics at Università degli Studi di Milano-Bicocca, Milan, Italy. Thesis title: “<i>Cosmic rays: diffusion in the interstellar medium.</i>” Supervisor: Prof Giorgio Sironi (UniMi-Bicocca).
EXTENDED RESEARCH VISITS	<ul style="list-style-type: none"> • August–October, 2015: Visiting student at Caltech, Pasadena, CA, USA. • October 2013–February 2015: Master’s thesis and research at the Astronomical Observatory of Brera, Merate, LC, Italy. Mentors: Dr Sergio Campana, Dr Paolo D’Avanzo. • August–October 2013: INFN/NFS Exchange Project - <i>Identifying GRBs with afterglow plateaus in LIGO S6 and VSR 2-3</i> - The George Washington University, Washington, DC, USA. Mentor: Prof Alessandra Corsi.

LEADERSHIP
AND SERVICES

- Referee for Astrophysical Journal (ApJ), Monthly Notices of the Royal Astronomical Society (MNRAS), Publications of the Astronomical Society of Australia (PASA), Publications of the Astronomical Society of Japan (PASJ)
- 2018–ongoing: Postdoc Representative, GROWTH Management Team
- December 2018–ongoing: Communication Coordinator, Zwicky Transient Facility Collaboration
- 2020–ongoing: Co-organizer of the weekly Cahill Time Domain Science Discussion, Caltech, Pasadena, CA, USA.
- 2019–2020: “Leader Development Coaching Program” with Barbara Blatz-Stone MA, Caltech & Claremont Graduate University, CA, USA
- Teaching Assistant Coordinator at the GROWTH Winter School 2019, San Diego State University, San Diego, CA, USA
- Head co-organizer of the GROWTH Winter School 2018, Indian Institute of Technology Bombay, Mumbai, India
- 2017: Student Representative at the Centre for Astrophysics and Supercomputing, Swinburne University, Hawthorn, VIC, Australia
- 2015–2018: Co-PI of the “Deeper Wider Faster” observational program (DWF; primary PI Cooke)
- 2016–2018: Liaison contact between the LIGO/Virgo collaboration and DWF for gravitational wave follow-up
- SOC member, Harley Wood Winter School of Astronomy 2017, Kioloa Coastal Campus (ANU), NSW, Australia

COMPETITIVE
GRANTS AND
AWARDS

- 2018: Vice-Chancellor’s Research Excellence Award, team prize, Swinburne University of Technology
- 2017: Best Poster Prize, CAASTRO Retreat 2017
- 2016: AAO PhD Scholarship Scheme Award
- 2015–2018: Swinburne University Postgraduate Research Award (SUPRA) - Swinburne University of Technology, Hawthorn, VIC, Australia
- 2014: Scholarship to Capable and Meritorious Students - Università degli Studi di Milano, Italy
- 2013: INFN/NSF LIGO-Virgo Exchange Project grant

OBSERVING
EXPERIENCE

- Keck/LRIS-ADC: 9 nights (7 remote observations from Swinburne University or Caltech, 2 observations at Waimea, Hawaii)
- Keck/NIRES: 1 night, remote observations from Caltech
- 8 nights with P200/DBSP or P200/WASP (7 remote observations from Caltech, 1 observation at Mount Palomar, CA)
- CTIO-Blanco/DECam: 37 nights (real-time analysis supervisor at Swinburne University)
- Subaru/Hyper-Suprime Cam: 2 nights (real-time analysis supervisor at Swinburne University)
- ANU 2.3m/WiFeS: 2 nights, remote observations from Swinburne University
- Nordic Optical Telescope/ALFOSC: 1 night at La Palma, Canary Islands

- 2020A/2020B: **Andreoni, Igor**; Coughlin, Michael; Fremling, Christoffer; Kasliwal, Mansi; Nordin, Jakob; Singer, Leo; Stein, Robert - *Automatic Follow-up of Optical Counterparts to Gravitational Waves and Short Gamma-ray Bursts* - Allocated 55 hr of LCO 1-m telescope time via the TOM Community Development Program.
- 2020A: **Andreoni, Igor**; De, Kishalay; Fremling, Christoffer; Ho, Anna; Kasliwal, Mansi; Kulkarni, Shri; Miller, Adam; Yao, Yuhang - *Rapid Spectroscopy of Young and Fast ZTF Transients* - Allocated 6 hr with Palomar 200-inch/DBSP (PT90); allocated 2 hr ToO observations with Keck/LRIS or Keck/DEIMOS (C233T).
- 2019B: **Andreoni, Igor**; Adams, Scott; De, Kishalay; Fremling, Christoffer; Ho, Anna; Kasliwal, Mansi; Kulkarni, Shri; Miller, Adam - *Rapid Spectroscopy of Young and Fast ZTF Transients* - Allocated 6 hr with Palomar 200-inch/DBSP (PT03); allocated 3 hr ToO observations with Keck/LRIS or Keck/DEIMOS (C251T).
- 2019B: **Andreoni, Igor**; Goldstein, Daniel (PIs); Barnes, Jennifer; Cenko, Brad; Coughlin, Michael; Kasliwal, Mansi; Nugent, Peter - *Public DECam Follow-Up of Neutron Star Mergers from the Third Gravitational Wave Observing Run* - ToO observations (2019B-0353).
- 2019A: Goldstein, Daniel; **Andreoni, Igor** (PIs); Barnes, Jennifer; Cenko, Brad; Coughlin, Michael; Kasliwal, Mansi; Nugent, Peter - *Public DECam Follow-Up of Neutron Star Mergers from the Third Gravitational Wave Observing Run* - ToO observations (2019A-0205).
- 2018B: **Andreoni, Igor**; Goldstein, Daniel (PIs); Barnes, Jennifer; Cenko, Brad; Coughlin, Michael; Kasliwal, Mansi; Nugent, Peter - *Public DECam Follow-Up of Neutron Star Mergers from the Third Gravitational Wave Observing Run* - ToO observations (2018B-0330).
- 2018B: **Andreoni, Igor**; Cooke, Jeff; Kasliwal, Mansi; Lidman, Chris; Goldstein, Daniel; Nugent, Peter - *Understanding optical counterparts to gravitational waves detected during the third Advanced LIGO and Virgo Observing Run* - Allocated up to 30 hr of ToO observations (A/2018B/02).
- 2016B: **Andreoni, Igor**; Cooke, Jeff; Ryder, Stuart; Flynn, Chris; Pritchard, Tyler; Bernard, Stephanie - *Deeper, Wider, Faster at AAT: Understanding optical counterparts to the fastest bursts in the sky* - Allocated 2 nights at AAT/AAOmega (A/2016B/20).
- 2016B: **Andreoni, Igor**; Cooke, Jeff; Pritchard, Tyler; Ryder, Stuart; Flynn, Chris; Petroff, Emily; Keane, Evan; Murphy, Michael - *Deeper, Wider, Faster: Optical counterparts to the fastest bursts in the sky* - Allocated 3 nights at CTIO-Blanco/DECam (2016B-0904).
- 2016A: **Andreoni, Igor**; Cooke, Jeff; Pritchard, Tyler; Flynn, Chris; Murphy, Michael; Keane, Evan; Petroff, Emily; Caleb, Manisha - *Deeper, Wider, Faster: Optical counterparts to the fastest bursts in the sky* - Allocated 2 nights at CTIO-Blanco/DECam (2016A-0619).

Co-I in proposals for observing time with the following facilities: *Swift*, XMM-Newton, Hubble Space Telescope, Blanco/DECam, Subaru/HSC, SkyMapper, LCOGT, Gemini/GMOS, Keck/LRIS, VLT/XShooter, SALT/RSS, *Spitzer*, REM, ESO VLT/NACO, VLBA, ATCA.

- February 10th–12th, 2020: GW Genesis Third Annual Area Symposium - Konan University, Kobe, Japan (invited talk contribution)
- January 21st, 2020: CaJAGWR Seminar, *DECam/GROWTH follow-up of a possible neutron star-black hole merger* - Caltech, Pasadena, CA, USA
- September 20th, 2019: IPAC Seminar, *Deep follow-up of gravitational waves with DECam and GROWTH facilities during O3* - IPAC, Pasadena, CA, USA
- May 3rd–4th, 2019: LIGO/LSST Workshop - Columbia University, New York City, NY, USA (invited talk contribution)

- November 13th–17th, 2017: IAU Symposium 339, Southern Horizons in Time-Domain Astronomy - Stellenbosch, South Africa (invited panelist)
- July 27th, 2017: Colloquium, *Deeper Wider Faster: a proactive approach to chase the fastest bursts in the sky* - Osservatorio Astronomico di Brera, Merate, Italy
- February 14th, 2017: CAASTRO Melbourne Area Meeting, “*Deeper Wider Faster*” *fresh news: 2-7 February 2017 observing run* - The University of Melbourne, Melbourne, VIC, Australia
- November 18th, 2016: Colloquium, *Real-time detection of fast transients with coordinated multi-wavelength observations* - AAO Headquarters, Sydney, NSW, Australia
- October 12th, 2016: Colloquium, *Catching fast transients in real time with coordinated multi-wavelength observations* - The University of Melbourne, Melbourne, VIC, Australia
- November 3rd, 2015: LIGO-Virgo Collaboration internal seminar, *Two novel time domain multi-wavelength surveys* - teleconference

CONFERENCES, WORKSHOPS AND SCHOOLS

- March 26th–27th, 2020: Workshop, *Enabling novel real-time multi-messenger studies* - DESY and Humboldt-Universität zu Berlin, Berlin, Germany (remote participation)
- March 23rd–25th, 2020: *ZTF Collaboration Meeting 2020* - DESY and Humboldt-Universität zu Berlin, Berlin, Germany (remote participation)
- September 30th–October 4th, 2019: *TOM Toolkit Workshop* - Carnegie Observatories, Pasadena, CA, USA
- September 3th–5th, 2019: *ZTF Collaboration Meeting 2019* - University of Washington, Seattle, WA, USA (talk contribution)
- August 8th–9th, 2019: *GROWTH Annual Meeting 2019* - San Diego State University, San Diego, CA, USA (talk contribution)
- April 25rd–26th, 2019: Workshop - *Enabling Multi-Messenger Astrophysics in the Big Data Era* - STScI, Baltimore, MD, USA (talk contribution)
- April 22rd–24th, 2019: Symposium, *The Deaths and Afterlives of Stars* - STScI, Baltimore, MD, USA (poster contribution)
- March 26th–29th, 2019: Asterics conference - *The New Era of Multi-Messenger Astronomy* - Groningen, Netherlands (talk contribution)
- December 6th–8th, 2018: *GROWTH Annual Meeting 2018* - IIT Bombay, Mumbai, India (talk contribution)
- October 17th, 2018: Workshop, *Deep Learning for Multimessenger Astrophysics: Real-Time Discovery at Scale* - NCSA, Urbana, IL, USA (talk contribution)
- September 18th–19th, 2018: *Swinburne-Caltech Data Science Workshop* - Caltech, Pasadena, CA, USA
- December 11th–15th, 2017: Conference - *Deciphering the Violent Universe* - Playa del Carmen, Q. Roo, Mexico (poster contribution)
- November 13th–17th, 2017: IAU Symposium 339 - *Southern Horizons in Time-Domain Astronomy* - Stellenbosch, South Africa (talk contribution)
- November 8th–10th, 2017: *OzGrav Annual Retreat 2017* - Melbourne, VIC, Australia (talk contribution)
- May 16th–18th, 2017: *ITSO Science Symposium 2017* - Mt. Stromlo Observatory, Canberra, ACT, Australia (talk contribution)

- November 28th–30th, 2016: *CAASTRO Annual Retreat 2016* - Busselton, WA, Australia (poster contribution)
- July 3rd–8th, 2016: *ASA Annual Scientific Meeting 2016* - Sydney, NSW, Australia (talk contribution)
- May 23rd–25th, 2016: Workshop - *The Mysterious Connection Between Superluminous Supernovae and Gamma Ray Bursts* - STScI, Baltimore, MD, USA (poster contribution)
- May 16th–19th, 2016: Conference - *The Transient Sky* - Harvard University, Cambridge, MA, USA (poster contribution)
- March 3rd, 2016: ausSMC Workshop - *Raising your profile and working with the Media* - Swinburne University, Hawthorn, Australia
- November 16th–18th, 2015: CAASTRO Annual Retreat 2015 - Leura, NSW, Australia (talk contribution)
- September 17th–18th-, 2015: *Keck Science Meeting* - UCLA, Los Angeles, CA, USA
- August 28th–29th, 2015: Workshop - *Boutiques & Experiments* - Caltech, Pasadena, CA, USA
- August 24th–27th, 2015: *iPTF Summer School 2015* - Caltech, Pasadena, CA, USA (poster contribution)
- July 5th–10th, 2015: *ASA Annual Scientific Meeting 2015* - Fremantle, Australia (talk contribution)
- July 2nd–5th, 2015: *Harley Wood School for Astronomy 2015* - Rottnest Island, Australia
- June 11th, 2015: Workshop - *Multi-messenger observations and studies of core-collapse supernovae* - Università degli Studi di Urbino “Carlo Bo”, Urbino, Italy
- April 15th, 2015: Workshop - *The needle in the haystack: Optical transient searches in the aLIGO era* - Monash University, Clayton, Australia (talk contribution)
- January 13th–24th, 2014: Astrophysics School - *Look & Listen: Electromagnetic and gravitational wave signals from compact objects* - Playa del Carmen, Q. Roo, Mexico

OUTREACH ACTIVITIES

- March 15th, 2019: Public Lecture, “*Look & Listen to the Violent Universe*”, Glendale City College, Glendale, CA, USA.
- May 11th, 2018: “*Look&Listen to the Universe*”, Physics in the Pub, Melbourne, Australia.
- April, 2018: Interview, “*Rintracciare i misteriosi fast radio burst in un ambiente cosmico estremo*”, published in the research magazine “OggiScienza”.
- November, 2017: Interview about the discovery of supernova iPTF14hls (*Nature* paper) published in Australian newspapers: The Age, Sydney Morning Herald, Canberra Times.
- October 20th, 2017: Public Lecture, “*The Violent Universe: explosions, transient events, and gravitational waves*”, Lecture Theatre, Swinburne University of Technology, Hawthorn, Australia.
- October, 2017: One article written and one interview released for the Italian newspapers “BergamoPost” and “L’Eco di Bergamo”.
- October 16th, 2017: Contribution to the OzGrav, Swinburne, and AAO Press Releases for the first multi-messenger discovery and follow up of an electromagnetic transient associated with a gravitational wave detection (GW170817).
- September 23rd, 2017: AstroLight Festival volunteer, Scienceworks, Melbourne, Australia.
- July 2017: [OzGrav video](#) - *We’ve discovered Gravitational Waves, what’s next?*.
- June 4th–18th, 2016: CAASTRO Astronomer in Residence, Ayers Rock (Uluru), Australia.

- January 20th, 2016: Invited speaker at the Mornington Peninsula Astronomical Society. Title of the talk: *The Violent Sky in Time Domain*, Frankston, VIC, Australia.
- August 2nd, 2015: Solar spots observations and AstroTour guide for the Open Day of the Swinburne University of Technology, Hawthorn, VIC, Australia.
- June 28th, 2015: Interview released for the Italian newspaper “L’Eco di Bergamo”.
- 2015–2018: AstroTour guide, Swinburne University of Technology, Hawthorn, VIC, Australia.
- October 2014: Book - “*Le Forme della Vita: Scienza e Bellezza nelle Lezioni dei Nobel*” (Shapes of Life: Science and Beauty in Nobel Laureates’ Lectures) - scientific curator, transcriber, and translator (from English to Italian) of lectures held by Nobel laureates at BergamoScienza science festival. Published in 300K copies by “Il Corriere della Sera”, RCS MediaGroup, via Solferino 28, 20121 Milano, Italy.

TEACHING
AND STUDENT
SUPERVISION

- Hands-on module lecturer, GROWTH Summer School 2019, San Diego State University, San Diego, CA, USA
- June–September 2019: Mentoring of SURF student Tegan Loveridge, California Institute of Technology, Pasadena, CA, USA
- Hands-on module lecturer, GROWTH Winter School 2018, Indian Institute of Technology Bombay, Mumbai, India
- January 2018 – Mentoring of undergraduate student Gillian Carter, *Science and Technology Internship*, Swinburne University of Technology, Hawthorn, VIC, Australia
- June 2017: Mentoring high school student Alex Sasik, work-experience project, Swinburne University of Technology, Hawthorn, VIC, Australia.
- Semester 2, 2016: Laboratory - *Discovering the Universe*, Swinburne University of Technology, Hawthorn, VIC, Australia.
- Semester 1, 2016: Physics tutorials - *Energy and Motion*, Swinburne University of Technology, Hawthorn, VIC, Australia.
- 2008–2015: Private tutoring in Physics and Mathematics to students attending: the “Politecnico di Milano” university (Mechanical Engineering, Construction Engineering, Civil Engineering, Architecture); the “Università degli Studi di Bergamo” university (Economics); High School (Scientific High School, Artistic High School, Technical and Industrial High School); Middle School; Primary School.