

Refereed Publications

- Abbott, T.M.C., M. Aguena, A. Alarcon, S. Allam, S. Allen, J. Annis, S. Avila, D. Bacon, K. Bechtol, A. Bermeo, G.M. Bernstein, E. Bertin, S. Bhargava, S. Bocquet, D. Brooks, D. Brout, E. Buckley-Geer, D.L. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F.J. Castander, R. Cawthon, C. Chang, X. Chen, A. Choi, M. Costanzi, M. Croce, L.N. da Costa, T.M. Davis, J. de Vicente, J. de Rose, S. Desai, H.T. Diehl, J.P. Dietrich, S. Dodelson, P. Doel, A. Drlica-Wagner, K. Eckert, T.F. Eifler, J. Elvin-Poole, J. Estrada, S. Everett, A.E. Evrard, A. Farahi, I. Ferrero, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, M. Gatti, E. Gaztanaga, D.W. Gerdes, T. Giannantonio, P. Giles, S. Grandis, D. Gruen, R.A. Gruendl, J. Gschwend, G. Gutierrez, W.G. Hartley, S.R. Hinton, D.L. Hollowood, K. Honscheid, B. Hoyle, D. Huterer, D.J. James, M. Jarvis, T. Jeltema, M.W.G. Johnson, M.D. Johnson, S. Kent, E. Krause, R. Kron, K. Kuehn, N. Kuropatkin, O. Lahav, T.S. Li, C. Lidman, M. Lima, H. Lin, N. MacCrann, M.A.G. Maia, A. Mantz, J.L. Marshall, P. Martini, J. Mayers, P. Melchior, J. Mena-Fernández, F. Menanteau, R. Miquel, J.J. Mohr, R.C. Nichol, B. Nord, R.L.C. Ogando, A. Palmese, F. Paz-Chinchón, A.A. Plazas, J. Prat, M.M. Rau, A.K. Romer, A. Roodman, P. Rooney, E. Rozo, E.S. Rykoff, M. Sako, S. Samuroff, C. Sánchez, E. Sanchez, A. Saro, V. Scarpine, M. Schubnell, D. Scolnic, S. Serrano, I. Sevilla-Noarbe, E. Sheldon, J. Allyn. Smith, M. Smith, E. Suchyta, M.E.C. Swanson, G. Tarle, D. Thomas, C. To, M.A. Troxel, D.L. Tucker, T.N. Varga, A. von der Linden, A.R. Walker, R.H. Wechsler, J. Weller, R.D. Wilkinson, H. Wu, B. Yanny, Y. Zhang, Z. Zhang, J. Zuntz: Dark Energy Survey Year 1 Results: Cosmological constraints from cluster abundances and weak lensing. *Physical Review D* 102, 023509 (2020).
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Poster

Biondi, F.: The AIV strategy of the common path of Son Of X-Shooter. SPIE Astronomical Telescopes + Instrumentation 2020 Digital Forum, December 2020.

Dennerl, K.: The calibration of eROSITA on SRG. SPIE Astronomical Telescopes + Instrumentation, 2020, Virtual Meeting, December 2020.

Emberger, V.: Avoiding the influence of optical light and cosmic rays on X-ray measurements. SPIE Astronomical Telescopes + Instrumentation Digital Forum 2020, virtual meeting, December 2020.

Frank, J.: Structural analysis of Athena WFI Large Detector Array. Space Telescopes and Instrumentation 2018: Ultraviolet to Gamma Ray, virtual meeting, December 2020.

Maureira, M.J.: Gas and Stellar Kinematics of the Young Binary System IRAS 16293-2422 A. Threats from the surroundings 2020 Workshop, Garching, Germany, November 2020.

Müller, B.: Laboratory Investigation of Layered Ice Mixtures. EAS 2020 Virtual Meeting, Leiden, Netherlands, June/July 2020.

Niebler, F.: Fiber Fabry-Perot interferometer as calibration source for medium resolution spectrographs in the visible range. SPIE Astronomical Instrumentation 2020, Advances in Optical and Mechanical Technologies for Telescopes and Instrumentation IV, Virtual Meeting, USA, December 2020.

Wölfer, L.: A highly non-Keplerian disc - Spiral structure in the gas disc of CQ Tau. EAS 2020 Virtual Meeting, Leiden, Netherlands, June/July 2020.

Talks

- Alves, F.: A case of simultaneous star and planet formation. Contributed Talk, Five years after HL Tau: a new era in planet formation/ESO, Munich, Germany, December 2020.
- Alves, F.: Gestación Cósmica: Cómo Nacen Las Estrellas. Public Talk, 4a Jornada de la Ciencia de LABChico / LAB-Chico: Laboratorio Subterráneo de Mineral del Chico, Mineral del Chico, Mexico, December 2020.
- Boller, Th.: Beobachtungen mit dem Event Horizon Telescope. Invited Talk, Rotary Meeting des Rotary Clubs München Residenz, Bayerischer Hof, Munich, Germany (remote), March 2020.
- Boller, Th.: eROSITA CALPV Observation of the NLS1 1H 0707-495: discovery of extreme and ultra-soft X-ray variability. Invited Talk, 9th International Workshop on Astronomy and Relativistic Astrophysics, IWARA 2020, Mexico City, Mexico (remote), September 2020.
- Boller, Th.: Messungen im Galaktischen Zentrum, Gravitationswellen und Event Horizon Beobachtungen. Public Talk, Vortragsreihe der Volkssternwarte München, Volkssternwarte München in Zusammenarbeit mit der VHS München, Munich, Germany, October 2020.
- Boller, Th.: Was wissen wir wirklich über Schwarze Löcher. Public Talk, Vortragsreihe des Rotary Clubs München Bavaria, Munich, Germany (remote), December 2020.
- Boller, Th.: Was wissen wir wirklich über Schwarze Löcher. Public Talk, Montagskolloquium der Sternwarte Sonneberg, Sternwarte Sonneberg, Sonneberg, Germany, March 2020.
- Bonholzer, M.: The DEPFET detectors of Athena's WFI: Status overview. Contributed Talk, 11th WFI Consortium Meeting, remote, April 2020.
- Bulbul, E.: Astrophysics and Cosmology with eROSITA. Invited Talk, EAS 2020, Leiden, The Netherlands (remote), June 2020.
- Bulbul, E.: First Results from eROSITA Observations of Galaxy Groups and Clusters. Invited Talk, EAS 2020, Leiden, The Netherlands (remote), June 2020.
- Bulbul, E.: First Results from eROSITA Observations of Galaxy Groups and Clusters. Colloquium, Department Seminar, INAF, Milano, Italy, October 2020.
- Caselli, P.: Astrochemistry at the dawn of star and planet formation. Colloquium, Onsala Space Observatory, Onsala, Sweden, January 2020.
- Caselli, P.: From Clouds to Planets, the Astrochemical Link. Colloquium, University of Concepcion, Concepcion, Chile, July 2020.
- Caselli, P.: From Clouds to Planets, the Astrochemical Link. Invited Talk, Astrochemistry Discussions, remote, April 2020.
- Caselli, P.: Making Life from Stardust. Public Talk, Astronomy on Tap, Gothenburg, Sweden, January 2020.
- Caselli, P.: Our Astrochemical Origins. Colloquium, Kapteyn Astronomical Institute, Groningen, The Netherlands, November 2020.
- Caselli, P.: Our Astrochemical Origins. Colloquium, Munich Joint Astronomy Colloquium, Munich, Germany, May 2020.
- Caselli, P.: Our Astrochemical Origins. Colloquium, University of Georgia, Athens, USA, October 2020.
- Caselli, P.: The crucial interplay of laboratory experiments, observations and theory to unveil our astrochemical origins. Invited Talk, 236th American Astronomical Society Meeting, USA (remote), June 2020.
- Caselli, P.: The interplay of observations, experiments and theory in understanding star formation. Invited Talk, 2020 European Astronomical Society Annual Meeting – SS11 Symposium: The molecular journey from stars to disks, The Netherlands (remote), June 2020.
- Clarke, J.: The Milky Way bulge: structure and global parameters from VIRAC and Gaia. Contributed Talk, EAS, Leiden, Netherlands, July 2020.
- Comparat, J.: SPIDERS AGN. Contributed Talk, SPIDERS winter workshop, Liverpool, UK, January 2020.
- Comparat, J.: The final SDSS-IV/SPIDERS X-ray point source spectroscopic catalogue. Contributed Talk, Astronomische Gesellschaft, Germany (remote), September 2020.
- Davies, R.: Ionized outflows in local luminous AGN: what is the real density and mass outflow rate. Contributed Talk, IAU Symposium 359: Galaxy Evolution and Feedback Across Different Environments (GALFEED), Bento Gonçalves, Brazil, March 2020.
- Davies, Re.: Probing AGN Feedback on Nuclear, Galactic and Circumgalactic Scales. Contributed Talk, Annual Meeting of the Deutsche Astronomische Gesellschaft, Germany (remote), September 2020.
- Davies, Re.: Properties and Demographics of Ionized Gas Outflows at $z \sim 1-3$. Colloquium, Galaxies&Cosmology Seminar, Cambridge, USA, February 2020.
- de Zeeuw, T.: Lodewijk Woltjer 1930-2019. Colloquium, European Astronomical Society Annual Meeting, remote, June 2020.
- de Zeeuw, T.: Stellar Orbits in Galaxies. Colloquium, Ringberg Meeting IR Group, Ringberg, Germany, July 2020.
- de Zeeuw, T.: The Nobel Prize in Physics 2020. Public Talk, Technical University Eindhoven, Eindhoven, The Netherlands, October 2020.
- de Zeeuw, T.: The Nobel Prize in Physics 2020. Public Talk, University Twente, Enschede, The Netherlands, October 2020.
- Dennerl, K.: The thrilling PV observation of Comet C/2018 W2. Contributed Talk, Virtual German eROSITA Meeting, remote, July 2020.

- Eisenhauer, F.: A New Era of Interferometry with GRAVITY. Invited Talk, SPIE Astronomical Telescopes and Instrumentation, Los Angeles, USA, December 2020.
- Eisenhauer, F.: GRAVITY+: All-Sky, High-Contrast, Milli-Arcsecond Optical Interferometric Imaging and Spectroscopy. Colloquium, Instituto de Astrofísica de Andalucía, Granada, Spain, November 2020.
- Eisenhauer, F.: Keep the focus - The instruments revealing the Galactic Center black hole – speckle interferometry, adaptive optics, imaging spectroscopy, interferometry. Invited Talk, NYRIA Virtual Workshop, Garching, Germany, October 2020.
- Fabricius, M.: Diffuse Emission Line Regions in HETDEX. Contributed Talk, HETDEX Science Meeting, Austin, Texas, USA (remote), Jan 2020.
- Fabricius, M.: Prime Focus Spectrograph (PFS): Fiber assignment through min-cost/max-flow. Contributed Talk, SPIE Astronomical Instrumentation 2020 Observatory Operations: Strategies, Processes, and Systems VIII, USA (remote), December 2020.
- Farrow, D.: Flux limits and LAE Clustering Measurements. Contributed Talk, HETDEX 2020 Science Meeting, University of Texas, Austin, USA, January 2020.
- Förster Schreiber, N.M.: Star-forming galaxies at cosmic noon. Invited Talk, The Growth of Galaxies in the Early Universe – VI, Sesto, Italy, January 2020.
- Förster Schreiber, N.M.: Uncovering galaxy evolution with kinematics. Invited Talk, EAS2020 Symposium S6: Stellar & Gas Kinematics in Galaxies Across Cosmic Time - Connecting Observations with Theory, Leiden, The Netherlands (remote), July 2020.
- Gajda, G.: Deprojecting stellar populations in the Andromeda Galaxy. Contributed Talk, Workshop „Dynamical Reconstruction of Galaxies“, Lorentz Center, Leiden, Netherlands, February 2020.
- Gao, F.: First four telescopes large-separation off-axis fringe-tracking interferometry with GRAVITY at the VLTI. Contributed Talk, SPIE Astronomical Telescopes + Instrumentation 2020 Digital Forum, remote, December 2020.
- Genzel, R.: A 40-Year Journey. Kolloquium, Festkolloquium zum Nobelpreis für Physik 2020, Münchner Physikerkolloquium, Munich, Germany (remote), November 2020.
- Genzel, R.: Black Holes. Invited Talk, Ringberg IR-Group Meeting, Schloss Ringberg, Germany, July 2020.
- Genzel, R.: Discussion between Nobel Laureate R. Genzel and Swedish Students. Invited Talk, Goethe- Institut Stockholm, Sweden (remote), November 2020.
- Genzel, R.: Eine Reise über 40 Jahre. Invited Talk, Sitzung des Senats der Max-Planck-Gesellschaft, Berlin, Germany (remote), November 2020.
- Genzel, R.: Evidence for Cored Dark Matter Distributions from Rotation Curves of $z=0.6-2.5$ Star Forming Disks. Colloquium, UC Berkeley Astronomy Colloquium, USA, January 2020.
- Genzel, R.: Inward Bound: A 35 year Journey. Invited Talk, LISA Consortium, Leiden, The Netherlands (remote), December 2020.
- Genzel, R.: Laureate Speech at the Nobel Prize Ceremony. Invited Talk, Bayerische Staatskanzlei, Munich, Germany, December 2020.
- Genzel, R.: Our Neighborly Supermassive Black Holes. Invited Talk, APS Physics Virtual April Meeting, Washington DC, USA (remote), April 2020.
- Genzel, R.: Schwarze Löcher: Grundlagenforschung braucht Zeit. Invited Talk, Parlamentarisches Frühstück, Munich, Germany (remote), December 2020.
- Genzel, R.: State Of The Union. Invited Talk, Ringberg IR-Group Meeting, Ringberg, Germany, October 2020.
- Genzel, R.: Testing General Relativity and The Massive Black Hole Paradigm with Infrared Interferometry. Colloquium, Munich Joint Astronomy Colloquium, Munich, Germany, April 2020.
- Genzel, R.: Testing the Massive Black Hole Paradigm and GR with Infrared Interferometry. Invited Talk, Colloquium, University of Maryland, Maryland, USA, September 2020.
- Genzel, R.: Testing the Massive Black Hole Paradigm and GR with Infrared Interferometry: A 40-Year Journey. Invited Talk, Colloquium of the Department of Physics IST, University of Lisboa, Portugal (remote), December 2020.
- Genzel, R.: The formation and evolution of star forming galactic disks. Invited Talk, MPA Colloquium, Max-Planck-Institut für Astrophysik, Garching, Germany (remote), December 2020.
- Genzel, R.: Self-introductory Speech. Invited Talk, closed sessions Academicians, Pontificia Accademia delle Scienze, Vatican City (remote), Oktober 2020.
- Gerhard, O.E.: Die neue Milchstrasse. Public Talk, Astronomische Gesellschaft der Universität Zürich, Zürich, Switzerland, February 2020.
- Gerhard, O.E.: Distribution of Dark Matter and Baryons in the centre of the Milky Way. Invited Talk, ESOz-2020: The build-up of galaxies through multiple tracers and facilities, Perth, Australia, February 2020.
- Gerhard, O.E.: Dynamics of the Milky Way, a theoretical perspective. Invited Talk, Linking the Galactic and Extragalactic, Wollongong, Australia, December 2020.
- Gerhard, O.E.: Nearby Galaxies Perspective. Invited Talk, IR Ringberg Meeting, Ringberg, Germany, October 2020.
- Gerhard, O.E.: Structure and evolution of the Milky Way and nearby disk galaxies. Colloquium, LAM Colloquium, Marseille, France, November 2020.
- Gerhard, O.E.: The power of M2M. Contributed Talk, Dynamical Reconstruction of Galaxies, Lorentz Centre, Leiden, The Netherlands, February 2020.
- Gillessen, S.: Das galaktische Zentrum - Einsteins Theorie im Test. Public Talk, Anton-Bruckner-Gymnasium Straubing, Straubing, Germany, September 2020.

Gillessen, S.: Das galaktische Zentrum: Einsteins Theorie im Test. Public Talk, Faszination Astronomie Online, MPI für Astronomie, Heidelberg (remote), May 2020.

Gillessen, S.: Das Schwarze Loch im Zentrum der Milchstraße. Public Talk, Stipendiatengruppe der Hanns-Seidel-Stiftung, remote, December 2020.

Gillessen, S.: General Relativistic Effects around the Galactic Center Black Hole. Invited Talk, The Fourth Zeldovich meeting, remote, April 2020.

Gillessen, S.: General Relativistic Effects around the Galactic Center Black Hole. Colloquium, University of Surrey, UK, January 2020.

Gillessen, S.: GRAVITY+: towards faint science, all sky milli arcsecond optical interferometric imaging. Contributed Talk, SPIE / Optical and Infrared Interferometry and Imaging VII, remote, December 2020.

Gillessen, S.: Testing general relativity with the massive black hole in the Galactic Center. Invited Talk, Princeton Gravity Initiative / PCTS Workshop „Exploring Supermassive Black Holes“, remote, October 2020.

Hou, J.: Clustering measurements in the final eBOSS quasar sample and their cosmological implications. Colloquium, INPA Seminar, Berkeley, USA, January 2020.

Hou, J.: SDSS eBOSS DR16 BAO Analysis. Contributed Talk, 235th AAS meeting, Honolulu, USA, January 2020.

Ider Chitham, J.: Cosmological constraints from CODEX galaxy clusters spectroscopically confirmed by SDSS-IV/SPIDERS DR16. Contributed Talk, SDSS Gotham Collaboration Meeting, New York, USA, June 2020.

Lee, M.: Cold gas studies on a $z=2.5$ protocluster. Contributed Talk, IAU Symposium 359: Galaxy Evolution and Feedback across different Environments (GALFEED), IAU Symposium, Bento Gonçalves, Brazil, March 2020.

Lipka, M.: Robust Schwarzschild models. Colloquium, OPINAS Seminar, Garching, Germany, June 2020.

Maureira, M.J.: Gas and Stellar kinematics of the Class 0 proto-binary system IRAS 16293-2422 A. Contributed Talk, Five years after HL Tau: a new era in planet formation, Santiago de Chile, Chile (remote), December 2020.

Maureira, M.J.: Gas and Stellar Kinematics of the Class 0 proto-binary system IRAS 16293-2422 A. Colloquium, SMA Seminar, Boston, USA (remote), October 2020.

Maureira, M.J.: Orbit and mass of an embedded binary system. Colloquium, JAO Colloquium, Santiago de Chile, Chile, January 2020.

Merloni, A.: Mapping the hot Universe: the first six months of operations of eROSITA on SRG. Colloquium, Astrophysics Colloquium, University of California at Santa Cruz, USA (remote), May 2020.

Merloni, A.: New eyes on the X-ray sky: First Results from eROSITA on SRG. Colloquium, Tel Aviv University Colloquium, Tel Aviv, Israel (remote), December 2020.

Merloni, A.: New eyes on the X-ray sky: First Results from eROSITA on SRG. Colloquium, UVA/NRAO Colloqui-

um, Charlottesville, USA (remote), November 2020.

Merloni, A.: SRG/eROSITA Status update: The first all-sky survey. Invited Talk, SDSS-IV/V Collaboration Meeting, New York, USA (remote), June 2020.

Merloni, A.: eROSITA detection of large-scale X-ray bubbles in the Milky Way halo. Invited Talk, ESO Informal Discussion, Garching, Germany, December 2020.

Merloni, A.: eROSITA detection of large-scale X-ray bubbles in the Milky Way halo. Contributed Talk, Excellence Cluster Origins Science Week, Kloster Irsee, Germany (remote), November 2020.

Merloni, A.: First Results from eROSITA on SRG. Invited Talk, IKI High Energy Astrophysics Conference, Moscow, Russia, December 2020.

Merloni, A.: Mapping Large Scale Structures at High Energies: First Results from eROSITA on SRG. Invited Talk, Tenth Zeldovich Conference, Minsk, Belarus (remote), September 2020.

Merloni, A.: Mapping Large Scale Structures at High Energies: First Results from eROSITA on SRG. Invited Talk, EAS 2020, Leiden, The Netherlands (remote), June 2020.

Merloni, A.: Mapping the hot Universe: eROSITA on SRG. Colloquium, Königstuhl Colloquium (KoCo), Heidelberg, Germany, February 2020.

Merloni, A.: Mapping the hot Universe: the first eight months of operations of eROSITA on SRG. Colloquium, CEA Seminaires d'Astrophysique, Saclay, Paris, France (remote), June 2020.

Merloni, A.: Mapping the hot Universe: the first six months of operations of eROSITA on SRG. Colloquium, INAF-IAPS-Seminar, Rome, Italy (remote), May 2020.

Merloni, A.: Mapping the hot Universe: the first six months of operations of eROSITA on SRG. Colloquium, KIPAC Colloquium, University of Stanford, Stanford, USA (remote), May 2020.

Merloni, A.: Mapping the hot Universe: the first six months of operations of eROSITA on SRG. Colloquium, Join Astronomy Colloquium, Garching, Germany, April 2020.

Merloni, A.: New eyes on the X-ray sky: First Results from eROSITA on SRG. Colloquium, University of Leicester Astronomy Colloquium, Leicester, UK (remote), December 2020.

Merloni, A.: New eyes on the X-ray sky: First Results from eROSITA on SRG. Colloquium, MAGIC Colloquium, Geneva, Switzerland (remote), November 2020.

Merloni, A.: New eyes on the X-ray sky: First Results from eROSITA on SRG. Colloquium, Radboud University Colloquium, Nijmegen, The Netherlands (remote), October 2020.

Merloni, A.: New eyes on the X-ray sky: First Results from eROSITA on SRG. Colloquium, Michigan University Astronomy Colloquium, Ann Arbor, Michigan, USA (remote), October 2020.

Merloni, A.: New eyes on the X-ray sky: First Results from

- eROSITA on SRG. Colloquium, ICRAR/UWA Colloquium, Perth, Australia (remote), October 2020.
- Merloni, A.: Mapping the hot Universe: the first seven months of operations of eROSITA on SRG. Colloquium, IoA Colloquium, Cambridge, UK (remote), May 2020.
- Müller, T.: Die Hayabusa-2 Mission. Public Talk, in der Reihe "Montagsvortrag" und als Teil des "Urknall, Weltall und das Leben"-Programms, Astronomiemuseum der Sternwarte Sonneberg, Sonneberg, Germany, February 2020.
- Müller, T.: Ryugu: A strange world in the Solar System. Public Talk, Astronomy on Tap, Kooks Bar, Munich, Germany, January 2020.
- Müller, T.: Thermophysical model of the Moon from 3.7 to 15 μm . Contributed Talk, Europlanet Science Congress 2020, Granada, Spain, September 2020.
- Müller, T.: Zu Besuch bei erdnahen Asteroiden. Public Talk, Steine im Weltall, Volkssternwarte München, Munich, Germany, February 2020.
- Müller-Seidlitz, J.: Detector Development. Colloquium, 12th Athena WFI Consortium Meeting, remote, November 2020.
- Parikh, T.: Stellar population gradients in early- and late-type galaxies. Contributed Talk, SDSS-IV/V Collaboration Meeting 2020, remote, June 2020.
- Predehl, P.: eROSITA aboard SRG. Colloquium, CALTECH, Pasadena, USA, August 2020.
- Predehl, P.: eROSITA und das heiße Universum. Public Talk, Planetarium, Hamburg, Germany, October 2020.
- Predehl, P.: eROSITA und die Dunkle Energie. Public Talk, Planetarium, Hamburg, Germany, February 2020.
- Predehl, P.: eROSITA und die Dunkle Energie. Public Talk, Wilhelm-Förster-Sternwarte, Berlin, Germany, January 2020.
- Predehl, P.: eROSITA, das neue Röntgenteleskop – Auf der Jagd nach der Dunklen Energie. Public Talk, Deutsches Museum, Munich, Germany, October 2020.
- Predehl, P.: eROSITA. Colloquium, AIFA University, Bonn, Germany, May 2020.
- Predehl, P.: eROSITA. Invited Talk, Cafe&Kosmos, Munich, Germany, April 2020.
- Predehl, P.: eROSITAs steiniger Weg in den Weltraum. Public Talk, FH Rosenheim, Rosenheim, Germany, November 2020.
- Predehl, P.: The Riddle of the North Polar Spur. Invited Talk, HEA 2020, Moscow, Russia, December 2020.
- Price, S.: Resolved Views of Galaxy Evolution and Feedback at Cosmic Noon. Invited Talk, IAU Symposium 359: Galaxy Evolution and Feedback Across Different Environments (GALFEED), Bento Gonçalves, Brazil, March 2020.
- Rab, Ch.: Interpreting high spatial resolution line observations of planet-forming disks: The case of HD 163296. Contributed Talk, Five years after HL Tau: a new era in planet formation, Santiago de Chile, Chile (remote), December 2020.
- Rab, Ch.: Interpreting high spatial resolution line observations of planet-forming disks with gaps and rings - The case of HD 163296. Contributed Talk, RUTD Conference – Planet Formation Witnesses and Probes: Transition Disks, Munich, Germany (remote), October 2020.
- Ramos-Ceja, M.E.: El Universo en rayos-X: el telescopio espacial eROSITA (Spanish). Public Talk, Central American-Caribbean Bridge in Astrophysics, Central America, remote, November 2020.
- Ramos-Ceja, M.E.: Poniendo a prueba la isotropía del Universo (Spanish). Public Talk, Lecture for physics students at University of Guadalajara, Guadalajara, Mexico, April 2020.
- Ramos-Ceja, M.E.: The Universe seen through X-ray eyes: the eROSITA telescope. Public Talk, Astronomy on Tap, Gothenburg, Sweden, October 2020.
- Rau, A.: Athena WFI. Invited Talk, Athena Study training activity for new ASST member, Germany (remote), June 2020.
- Rau, A.: Athena/WFI Science. Invited Talk, Japanese Workshop for Athena, Germany (remote), December 2020.
- Rau, A.: Athena/WFI Status Update. Invited Talk, Athena/X-IFU Consortium Meeting #11, Germany (remote), April 2020.
- Rau, A.: Exploring the Hot and Energetic Universe with Athena. Public Talk, Lecture at University Bonn, Bonn, Germany (remote), May 2020.
- Rau, A.: SRG/eROSITA. Invited Talk, Enabling novel real-time multi-messenger studies – Session D: Next generation observational facilities, Germany (remote), March 2020.
- Rau, A.: Synergies of Chandra, SRG/eROSITA, and Athena in X-ray Time Domain Studies. Invited Talk, Chandra Frontiers in Time-Domain Science, Germany (remote), October 2020.
- Redaelli, E.: Deuteration of N_2H^+ and HCO^+ in the prestellar core L1544. Contributed Talk, Astrochemical Frontiers - Quarantine Edition, Munich, Germany (remote), June 2020.
- Redaelli, E.: Unveiling the magnetic properties of a protostellar core with SOFIA. Colloquium, Week's Astro UdeC Seminar, Concepcion, Chile (remote), June 2020.
- Redaelli, E.: Unveiling the Magnetic Properties of a Protostellar Core with SOFIA. Invited Talk, SOFIA Tele-Talks, Munich, Germany (remote), April 2020.
- Salvato, M.: eROSITA on SRG: a dream come true. Invited Talk, AAS 235-XRSIG session, Honolulu, Hawaii, USA, January 2020.
- Salvato, M.: eROSITA (aka: Dave, now the fun begins!). Contributed Talk, Dave Sanders's 30th Anniversary in Hawaii: Extreme Galactic Nuclear Activity – Ultraluminous

Starbursts and AGN, Honolulu, Hawaii, USA, January 2020.

Salvato, M.: eRosita: looking at the Universe with 7 open X-ray eye. Colloquium, ESA, remote, July 2020.

Salvato, M.: eROSITA: the first 365 days. Invited Talk, Probing the Extragalactic Universe with High Energy and Very High Energy Sources, remote, December 2020.

Salvato, M.: eROSITA's revolutionary view on AGN. Invited Talk, Virtual Annual Meeting of the Astronomische Gesellschaft 2020, remote, September 2020.

Salvato, M.: What will we learn from eRosita. Invited Talk, Getting ready to descend the slippery slope of multimes-sanger cosmological black holes data, Sexten, Italy, February 2020.

Sánchez, A.G.: Let us bury the prehistoric h: arguments against using Mpc/h units in cosmology. Contributed Talk, ICTP-SAIFR Latin American Workshop on Observational Cosmology, Sao Paulo, Brazil, December 2020.

Sánchez, A.G.: Let us bury the prehistoric h: arguments against using Mpc/h units in cosmology. Colloquium, COSMOSat seminar, CEA Paris-Saclay, Paris, France, August 2020.

Sánchez, A.G.: Let us bury the prehistoric h: arguments against using Mpc/h units in cosmology. Colloquium, Institute de Astrofísica de Canarias, Tenerife, Spain, July 2020.

Sánchez, A.G.: Let us bury the prehistoric h: arguments against using Mpc/h units in cosmology. Invited Talk, Cosmo@AR, Astronomic Observatory of La Plata, La Plata, Argentina, July 2020.

Sánchez, A.G.: Let us bury the prehistoric h: arguments against using Mpc/h units in cosmology. Invited Talk, Inter-institutional Laboratory for e-Astronomy, Sao Paulo, Brazil, April 2020.

Sánchez, A.G.: Let us bury the prehistoric h: arguments against using Mpc/h units in cosmology. Colloquium, MPA Cosmology Seminar, Munich, Germany, April 2020.

Sánchez, A.G.: Let us bury the prehistoric h: arguments against using Mpc/h units in cosmology. Colloquium, Joint Cambridge-Munich Journal Club, Munich, Germany, April 2020.

Sánchez, A.G.: Let us bury the prehistoric h: arguments against using Mpc/h units in cosmology. Colloquium, Astronomic Observatory of Cordoba, Cordoba, Argentina, March 2020.

Segura-Cox, D.: An Envelope Streamer Feeding a Ringed Disk in the Class I Phase. Colloquium, MPA Disk Group (Seminar), Munich Germany, November 12, 2020.

Segura-Cox, D.: An Envelope Streamer Feeding a Ringed Disk in the Class I Phase. Colloquium, Harvard-Smithsonian Center for Astrophysics (SMA Seminar), Munich, Germany, September 2020.

Segura-Cox, D.: Observations of Class 0/I Protostars: Disk Diversity at Early Times. Invited Talk, Building Blocks

of Planets 2020, Munich, Germany, April 2020.

Segura-Cox, D.: Rings in a Young Embedded Disk: Footholds of Planet Formation at Early Times. Contributed Talk, Europlanet Science Congress 2020, Munich, Germany, September 2020.

Segura-Cox, D.: Rings in a Young Embedded Disk: Footholds of Planet Formation at Early Times. Contributed Talk, European Astronomical Society Annual Meeting 2020, Munich, Germany, July 2020.

Shangguan, J.: Resolving AGN broad line regions with the near-infrared VLTI/GRAVITY interferometer. Contributed Talk, Virtual Annual Meeting of the German Astronomical Society, Germany (remote), September 2020.

Shangguan, J.: The spatially resolved broad line region of IRAS 09149-6206. Contributed Talk, Supermassive Black Holes, Pucon, Chile, December 2020.

Shimizu, T.T.: The Molecular Gas Content of Local AGN Host Galaxies. Contributed Talk, IAUS 359: Galaxy Evolution and Feedback Across Different Environments, Bento Gonçalves, Brazil, March 2020.

Shimizu, T.T.: A complete characterisation of the sub-pc region around NGC3783 with VLTI/Gravity. Contributed Talk, Supermassive Black Holes, Chile (remote), December 2020.

Shimizu, T.T.: The resolved size and structure of hot dust around AGN with VLTI/Gravity. Contributed Talk, Annual meeting of the German Astronomical Society 2020, Germany (remote), September 2020.

Spezzano, S.: Molecules as Astrophysical tools. Colloquium, Institute Colloquium, Chalmers Universty, Sweden (remote), June 2020.

Stadler, J.: Static phase aberrations in near-IR interferometry and GRAVITY's determination of the galactic center distance. Contributed Talk, SPIE Astronomical Telescopes and Instrumentation, USA (remote), December 2020.

Straub, O.: GRAVITY Plus: Blick in den Himmel (Teil2). Invited Talk, Max Planck Foundation: Board Meeting, with prospective donors/sponsors, Munich, Germany, December 2020.

Straub, O.: GRAVITY Plus: Blick in den Himmel. Invited Talk, Max Planck Foundation, Board Meeting (Kuratorium), Munich, Germany, October 2020.

Tacconi, L.J.: Observing Molecular Gas in Star Forming Galaxies at High Redshift. Invited Talk, ngVLA Summer Talk Series, Charlottesville, USA (remote), September 2020.

Tacconi, L.J.: Observing Molecular Gas in Star Forming Galaxies at High Redshift. Invited Talk, European Astronomical Society Symposium, Linking Gas and Star Formation throughout Cosmic Time, remote, June 2020.

Tacconi, L.J.: The Evolution of the Star Forming Interstellar Medium Across Cosmic Time. Invited Talk, Origins Cluster Science Afternoons Series, Garching, Germany, December 2020.

- Tacconi, L.J.: The Evolution of the Star Forming Interstellar Medium Across Cosmic Time. Invited Talk, The Royal Swedish Academy of Sciences Astronomy and Space Science Class Meeting, Stockholm, Sweden (remote), November 2020.
- Thomas, J.: Dynamics of Elliptical Galaxies: Supermassive Black Holes, Cores and the IMF. Contributed Talk, 10th IMPRS Symposium, Garching, November 2020.
- Übler, H.: The Kinematics and Dark Matter Fractions of TNG50 Galaxies at $z=2$ from an Observational Perspective. Colloquium, Center for Computational Astrophysics, New York, USA, October 2020.
- van Dishoeck, E.: A WISH come true: Water in Star-forming regions with Herschel. Colloquium, Space Research Organization Netherlands, Utrecht, Netherlands, August 2020.
- van Dishoeck, E.: Building bridges: my career in Astrochemistry. Colloquium, Astrochemistry discussions seminar series, Boston, USA, May 2020.
- van Dishoeck, E.: Building stars, planets and the ingredients for life in space. Public Talk, Indian Academy of Sciences, New Delhi, India, October 2020.
- van Dishoeck, E.: Building stars, planets and the ingredients for life in space. Public Talk, University of Cape Town, Cape Town, South Africa, February 2020.
- van Dishoeck, E.: Chemistry of the heavens. Colloquium, Wellesley College, Cambridge, USA, April 2020.
- van Dishoeck, E.: Molecules from clouds to disks and planets. Invited Talk, University of Sao Paulo, Sao Paulo, Brazil, November 2020.
- van Dishoeck, E.: OH mid-infrared emission as a diagnostic of H₂O photodissociation. Invited Talk, Molec 2020 conference, Hamburg, Germany, August 2020.
- van Dishoeck, E.: Our origins in space. Public Talk, Carnegie Lecture, Carnegie Foundation, Washington, USA, October 2020.
- van Dishoeck, E.: Our origins in space. Public Talk, Kavli Foundation, Los Angeles, USA, June 2020.
- van Dishoeck, E.: Our origins in space. Public Talk, World Economic Forum, Davos, Switzerland, January 2020.
- van Dishoeck, E.: Probing the inner regions of disks with mid-IR spectroscopy. Invited Talk, Transitional disk meeting, Bormio, Italy, February 2020.
- van Dishoeck, E.: Zooming into planet-forming zones of disks with ALMA. Colloquium, University of Milan, Milan, Italy, December 2020.
- van Dishoeck, E.: Zooming into planet-forming zones of disks with ALMA. Colloquium, University of Athens, Athens, Greece, November 2020.
- van Dishoeck, E.: Zooming into planet-forming zones of disks with ALMA. Colloquium, Joint Astrophysics Colloquium, Munich, Germany, July 2020.
- van Dishoeck, E.: Zooming into planet-forming zones of disks with ALMA. Colloquium, UCLA, Los Angeles, USA, June 2020.
- Widmann, F.: Polarization analysis of GRAVITY and the VLTI. Contributed Talk, SPIE Astronomical Telescopes + Instrumentation, 2020, remote, December 2020.
- Widmann, F.: The supermassive blackhole in the Galactic center. Public Talk, MAGIC collaboration meeting, remote, November 2020.
- Wölfer, L: A highly non-Keplerian disc - Spiral structure in the gas disc of CQ Tau. Contributed Talk, Five Years After HL Tau, Chile (remote), December 2020.
- Wölfer, L: A highly non-Keplerian disc - Spiral structure in the gas disc of CQ Tau. Contributed Talk, RUTD-Conference (remote), Munich, Germany, October 2020.
- Wylie, S.: Abundance maps of the Milky Way's b/p bulge and long bar using the combined A2A and APOGEE surveys. Contributed Talk, MW-Gaia Workshop 2021, Heidelberg, Germany, February 2020.
- Zhao, B.: The role of microphysics and non-ideal MHD effects in the formation of protoplanetary disks. Colloquium, Astrophysics Journal Club/Seminar, McMaster University, Canada, October 2020.
- Zhao, B.: The role of microphysics and non-ideal MHD effects in the formation of protoplanetary disks. Colloquium, SMA Seminar Series, CfA at Harvard

PhD Theses

Agurto Gangas, C.: Study of grain growth in the early phases of protostars: from envelopes to disks. Ludwig-Maximilians Universität München, 2020.

Baronchelli, L.: AGN in the x-ray relativistic effects in the Fe K alpha line. Ludwig Maximilians Universität München, München, 2020.

Berlato, F.: New constraints on gamma-ray bursts. Technische Universität München, München, 2020.

Bhattacharya, S.: The survey of planetary nebulae in Andromed (M31): discrete tracers in the disc and inner halo. Ludwig Maximilians Universität München, München, 2020.

Chantzos, J.: High resolution spectroscopy of molecules of astrophysical interest and radio astronomical observations of star-forming regions. Ludwig-Maximilians Universität München, 2020.

Davies, Re.: Feedback in Galaxies During the Peak Epoch of Cosmic Star Formation Activity and Black Hole Growth. Ludwig-Maximilians-Universität München, 2020.

Jiménez-Rosales, A.: Polarization properties of GRMHD black hole accretion models. Ludwig-Maximilians-Universität München, 2020.

Käfer, F. M.: Characterization of extended emission from groups and clusters of galaxies. Ludwig Maximilians Universität München, München, 2020.

Milakovic, D.: Fundamental physics and cosmology using astronomical laser frequency combs. Ludwig-Maximilians-Universität München, 2020.

Müller-Seidlitz, J.: A megahertz active pixel sensor for X-ray astronomy: spectroscopic DEPFET arrays with integrated storage. Ludwig-Maximilians-Universität München, 2020.

Pleintinger, M. M. M.: Star groups and their nucleosynthesis. Technische Universität München, München, 2020.

Prudenzano, D.: Molecules of astrochemical interest: theoretical and experimental studies. Ludwig-Maximilians Universität München, 2020.

Redaelli, E.: Dynamical and chemical properties of magnetised star-forming regions. Ludwig-Maximilians Universität München, 2020.

Master Theses

- Beitler, C.: Thermal Design and Analysis of an X-Ray Space Instrument. Technische Universität München, 2020.
- Crosta, M.: Rest frame optical properties of Lyman-alpha emitters from the HETDEX Survey. University of Bologna, 2020.
- Erhart, M.: Implementation and optimization of non-parametric clustering algorithms on aRISC-V softcore. Technische Universität München, 2020.
- Hou, J.: Anisotropic clustering analysis of the Quasar Sample from SDSS-IV extended Baryon Oscillation Spectroscopic Survey. Ludwig-Maximilians-Universität München, 2020.
- Krecker, K.: Wendelstein First Ring: Integration and Characterisation of the Telescope Simulator and Stability of Radial Velocity Measurements. Ludwig-Maximilians-Universität München, 2020.
- Lipka, M.: Inclination recovery with Schwarzschild models. Ludwig-Maximilians-Universität München, 2020.
- Schmidt, T.: Automated Positron Beam Adjustment and New Detector Read-Out at the Coincidence Doppler Broadening Spectrometer. Technische Universität München, 2019.

Bachelor Theses

- Ahmeti, D.: Simulationen zur Entstehung und Entwicklung von Elliptischen Galaxien. Ludwig-Maximilians-Universität München, 2020.
- Azuar, S.: Zur Erforschung extrasolarer Planeten und ihrer Eigenschaften in Kepler-Multiplanetensystemen. Ludwig-Maximilians-Universität München, 2020.
- Illich, B.: Tektonik auf Exoplaneten in Zusammenhang mit der Suche nach extraterrestrischem Leben. Ludwig-Maximilians-Universität München, 2020.
- Kubanowski, E.: Das Alter einer Galaxie. Ludwig-Maximilians-Universität München, 2020.
- Matuschek, A.: Exomonde. Ludwig-Maximilians-Universität München, 2020.
- Rufer, D.: Massenbestimmung supermassereicher Schwarzer Löcher. Ludwig-Maximilians-Universität München, 2020.
- Schösser, E.: Constraining GRB Afterglow Fireballs with Late Two-Shell Collisions. Technische Universität München, 2020.
- Seidel, B.: Supermassereiche Schwarze Löcher in aktiven Galaxiekernen und die Eisen K- α Linie. Ludwig-Maximilians-Universität München, 2020.
- Thomas, L.: Die Suche nach Exoplaneten in der habitablen Zone um M-Zwerg. Ludwig-Maximilians-Universität München, 2020.
- Tschirschwitz, J.: Atmosphären und Bewohnbarkeit von erdähnlichen Exoplaneten in der habitablen Zone. Ludwig-Maximilians-Universität München, 2020.
- Tsina, I.: Die Entwicklung der Tully-Fischer Relation. Ludwig-Maximilians-Universität München, 2020.
- Waldmann, P.: Masse-Radius Beziehung bei Super-Earths und Sub-Neptunes sowie deren Verteilung. Ludwig-Maximilians-Universität, 2020.
- Yun, J.: Fragmentation of Dust Aggregates in Molecular Clouds. Ludwig-Maximilians-Universität München, 2020.