TALKS		
Aleksandra Grudskaia	Degeneracies in forward modelling of strong gravitational lens galaxies	In this work, we aim to constrain dark matter properties with optical observations of gravitational lenses. We use a forward modelling
Andrea Bolamperti	Extended surface brightness modeling of three sources strongly lensed by an ultra-massive elliptical galaxy	Despite the discovery of hundreds of galaxy-scale lenses, there are only few known cases in which two sources at different redshifts are
Aristeidis Amvrosiadis	A multi-wavelengths view of the ISM for two dusty star-forming galaxies at z~4	Dusty star-forming galaxies at the peak of cosmic star-formation and beyond have been at the forefront of galaxy evolution studies for the
Ashish Kumar Meena	Extremely magnified stars in cluster lenses	The first serendipitous detection of a highly magnified star in a spiral galaxy (z=1.49) lensed by a galaxy cluster, MACS1149 (z=0.54), has
Birendra Dhanasingham	Effectively Investigating Dark Matter Microphysics with Strong Gravitational Lensing Anisotropies in the Era of Big Data	Strong gravitational lensing has emerged as a promising tool for probing the nature and distribution of dark matter on sub-galactic
Chin Yi Tan	Testing the bulge-halo conspiracy: joint lensing-dynamics constraint on the mass profile of elliptical galaxies from the largest galaxy-	From observations of strong lensing, stellar dynamics, and X-ray intensity, the total density profile in elliptical galaxies has been found
Chris Fassnacht	Finding the golden lenses for dark matter investigations	As we enter the era of big data, strong gravitational lens samples will vastly increase in size. Although data from large surveys will provide
Conor O'Riordan	The multiple subhalo conspiracy	In gravitational imaging, dark matter models can be constrained by searching for dark matter subhaloes in strong lenses. We reveal here
Dan Ryczanowski	Gravitationally lensed gravitational waves - detection prospects in O4 and beyond	Unambiguous detection of a lensed gravitational wave will unlock exciting new science in fundamental physics, cosmology and
Daniel Ballard	Gravitational imaging through a triple source plane lens	The validity of the Cold Dark Matter (CDM) paradigm is currently poorly constrained on sub-galactic scales. Lens modelling can
Daniel Gilman	Constraints on beyond-LambdaCDM dark matter physics from quadruply-imaged quasars	The properties of dark matter halos and subhalos on scales below 10^9 solar masses depend on the formation mechanism, mass, and
Davide Abriola	Combined strong and weak gravitational lensing mass measurements in galaxy clusters	Gravitational lensing in clusters of galaxies is one of the most powerful methods to probe the dark matter mass distribution inside
Devon Powell	Warm and fuzzy dark matter constraints using a single VLBI observation of a gravitationally lensed radio jet	Strong gravitational lensing by galaxies provides us with a powerful laboratory for testing dark matter models. Various particle models for
Devon Williams	Finding quadruply imaged quasars with machine learning	We produce a list of Quadruply Imaged Quasar candidates found in the Dark Energy Survey (DES) Year 6 images by applying a
Di Wen	Sub-haloes or systematics: Flux ratios anomalies of quadruply lensed radio AGN	Anomalous flux ratios between lensed images can provide a key test of the dark matter sub-halo population, and hence the properties of
Dominique Sluse	Learning about the structure of AGNs from lightcurves of hundreds of strongly lensed AGNs	Lightcurves of strongly lensed AGNs are mostly scrutinised for measuring the time delays between lensed images, a key ingredient
Dorota Bayer	Observational constraints on the sub-galactic matter power spectrum from galaxy-galaxy strong gravitational lensing	While a direct detection of the dark-matter particle remains very challenging, it could be possible to constrain the nature of dark
Fabrizio Gentile	Bayesian Neural Networks: machine learning, uncertainties and strong lensing	About 100.000 strong gravitational lenses will be discoverable in the massive datasets produced by next-generation facilities such as
Georgios Vernardos		Analysis of galaxy-galaxy lens systems can lead to groundbreaking results on the mass content of the galaxy-lens, allowing to place
Giovanni Granata	Investigating the structure of cluster galaxies with combined strong lensing and stellar kinematics	Strong lensing (SL) is a powerful probe of the dark matter mass distribution in the cores of galaxy clusters, providing us with insights
Giuseppe Angora	Deep Learning based search for galaxy scale-lenses in galaxy cluster environment	In the current era of big data, the development of methods able to autonomously extract information from vast multi-dimensional
Hakon Dahle	Finding lens systems with extreme properties.	We report on discoveries of new samples of lens systems with extreme properties, based on our ongoing lens searches in public
Han Wang	Constraining the multi-scale dark-matter distribution in CASSOWARY 31 with strong gravitational lensing and stellar	Measuring the distribution of dark matter within dynamically relaxed galaxy groups provides an opportunity to test the evolution of dark
Hannah Turner	Insights into the inner structure of the SLACS lens galaxies from multiple-component dynamical modelling	The combination of strong lensing and dynamical studies is an especially powerful tool in decoupling the stellar and dark matter
Irham Taufik Andika	When Spectral Modeling Meets Convolutional Networks: A Method for Discovering Reionization-era Lensed Quasars in Multi-band	Over the last two decades, around three hundred quasars have been discovered at redshift > 6, yet only one was identified as being
Jared Cathey	Signatures of a Merger in SPT 0418-47	SPT 0418-47 is a high redshift lensed galaxy recently observed as part of the JWST ERS program TEMPLATES (Targeting Extremely
Javier Alejandro Aceveda Barroso	Searching for lensing by edge-on galaxies in UNIONS	Gravitational lensing has proven to be a very powerful tool to measure the mass profile of galaxies. In particular, the combination
John McKean	The first search for strong gravitational lenses with the International LOFAR Telescope	Gravitational lenses that are also radio-bright can provide a unique sample of systems that can be used for studying galaxy formation,
Jose Diego	Extremely magnified stars at z>1	The discovery of Icarus represented the beginning of a new branch of strong lensing that focuses on stars at cosmological distances
Joshua Fagin	Measuring the Substructure Mass Power Spectrum of 23 SLACS Strong Galaxy-Galaxy Lenses Using an Uncertainty Aware CNN	Strong gravitational lensing can be used as a tool to study the substructure in the mass distribution of galaxies and to constrain
Justin Pierel	LensWatch: Hubble Observations and Constraints for Two New Gravitationally Lensed Supernovae	Two new gravitationally lensed supernovae (SNe), both spectroscopically classified as Type Ia, were discovered in August
Karl Glazebrook	A large space based lens survey	The next few years will see a boon in large samples of gravitational lenses observed with ground based images (e.g. LSST) and space
Lukas Furtak	Very Large Telescopes (VLTs) in the sky -- Modeling large-scale clusters with multiple strong lensing cores in the JWST era	With the advent of the JWST, a new era in high-redshift galaxy observations has begun. Using strong lensing (SL) galaxy clusters as
Lyne Van de Vyvere	Large data set of lensed quasars: higher accuracy on H0? The angular structures viewpoint.	Thanks to Euclid, the Rubin Observatory, the Roman Space Telescope and the Chinese Space Station Telescope, a tremendous
Martin Millon	Strong lensing *by* quasars in the era of large imaging and spectroscopic surveys.	The tight correlations found between the mass of the supermassive black holes (SMBH) and their host galaxy luminosity, stellar mass,
Matt O'Dowd		In the near future, wide field surveys will discover 1000's of new strongly lensed quasars, and these will be monitored with
Matthew Gomer	Accounting for population-level systematic effects using a hierarchical strategy	More and more lens systems are being modeled with the intention to measure a joint constraint on H_0. While the statistical scatter is
Minghao Yue	Measuring the high-redshift M-sigma relation using highly magnified galaxies	The M-sigma relation is one of the most important indications for the coevolution of SMBHs and their host galaxies. The redshift evolution
Nan Li	automated analysis of Strong gravitational lenses in the era of Big Data	Gravitational lensing is considered one of the most powerful tools to investigate the dark matter and dark energy in the Universe, which
Nan Zhang	Fitting the ALMA strong lensing images in the image plane	Strong gravitational lensing serves as a cosmic telescope that enables observations of faint and distant galaxies at high spatial
Nikki Arendse	The present and future of lensed supernovae: from ZTF to LSST	Gravitationally lensed supernovae are extremely rare and powerful probes that can reveal more about high-redshift supernova physics,
Patrick Kamieneski	Where are the Eddington-limited starbursts? A sub-kpc view of star formation in lensed hyper-luminous dusty star-forming galaxies	In the past decade, submillimeter surveys have been employed to define samples of gravitationally-lensed dusty star-forming galaxies
Pietro Bergamini	High-precision strong lensing models of galaxy clusters in the JWST era	Since its launch about one year ago, the high-angular resolution and sensitivity of the JWST have revolutionized our way of observing and
Q.Daniel Wang	X-raying Hyper-luminous Dusty Star-Forming galaxy via strong gravitational lensing	Extremely luminous dusty star forming galaxies (DSFGs) represent asymptotic examples of rapid star formation in the early Universe.
Qiuhan He	Revealing lower mass dark matter substructures in HST imaging of strong lenses via Multi-Gaussian Expansions (MGEs)	Galaxy-galaxy strong gravitational lensing acts as a promising tool to constrain the dark matter particle mass, by detecting small dark
Raoul Canameras	Cosmology and stellar physics with strongly lensed supernovae in the era of LSST	Supernovae (SNe) that are gravitationally lensed into multiple images offer interesting avenues to probe stellar physics and cosmology.
Raven Gassis	Multi-component Analysis of Strong Lensing Galaxy Clusters as an Observational Test of ΛCDM Predictions	The properties of the mass and light distributions for galaxy clusters are sensitive to deviations from the expected alignment of these
Ryan Keeley	Pushing the Limits of Detectability: Mixed Dark Matter from Strong Gravitational Lenses	One of the frontiers for advancing what is known about dark matter lies in using strong gravitational lenses to characterize the population
Sergei Gleyzer	Machine learning-based analysis and inference of strong gravitational lensing systems in present and next generation surveys	My talk will present the development and application of state of the art machine learning algorithms to various strong gravitational

Shawn Knabel	Breaking MAD: joint constraints on the anisotropy and mass profile of massive elliptical galaxies	We measure spatially-resolved kinematics and model the dynamics of 14 SLACS lenses. Using observations from Keck KCWI integral
Sreevani Jarugula	Nuisance invariant strong lens detection	With the next generation of telescopes and surveys, millions of strongly lensed galaxies are going to be discovered. Machine
Stefan Schuldt	From image position to extended image modeling in the era of JWST: improved mass models of strong lensing clusters MACS 1149	Strong lensing (SL) in galaxy clusters is a powerful tool to probe various properties of the Universe. For instance, SL allows one to
Sydney Erickson	Deep Learning and Hierarchical Inference to Infer H0 From All the Rubin Lenses	To achieve a high precision measurement of Dark Energy from strongly lensed AGN and supernovae, we need to take advantage of
Tania Barone		Galaxy-galaxy strong lenses are well known for the rare opportunity they provide to measure the invisible dark matter content of the
Uros Mestric	Very massive stars at cosmological distances	Investigating tiny structures (<100pc size) inside of the galaxies until recently was only feasible at lower redshift. Thanks to reliable lens

POSTERS		
Carina Fian	BLR Structure and Mass Fraction in Compact Objects in SDSS J1004+4112 from Spectroscopic Data	We use microlensing measurements to estimate the fraction of mass composed of compact objects and the size of the background
Cristiana Spingola	The first time-delay measured with VLBI: the radio view of the outstanding gamma-ray flare from PKS 1830-211	We present results from a dense VLBI monitoring of the brightest lensed blazar PKS 1830-211 (z=2.5). Time delays are a primary
Edoardo Borsato	Study of a sample of Herschel selected strong lens candidates observed with HST.	The bright tail of the number counts of galaxies at sub-mm wavelengths comprises a mixture of distinct galaxy populations: low-
Graham Smith	Strong lensing magnification bias and universal scalings in the era of big data	The era of big data is an exciting opportunity to discover hundreds of gravitationally lensed explosive transients, including many flavours of
Jimena Gonzalez	Searching for gravitational lenses in the Dark Energy Survey	A sample of thousands of non-time-delay gravitational lenses can be used to study galaxy evolution by probing mass density profiles and
Kim-Vy Tran	The AGEL Survey: Strong Gravitational Lenses in the DES and DECaLS Fields	We present spectroscopic confirmation of strong gravitational lenses as part of our ASTRO 3D Galaxy Evolution with Lenses (AGEL)
Laura Leuzzi	Characterization of Convolutional Neural Networks for the identification of Galaxy-Galaxy Strong Lensing events	Studying galaxy-scale strong lenses enables tackling several problems, from the reconstruction of the mass distribution of the lens
Lorenzo Bazzanini	Advanced deep learning technique for searching arcs and lensed QSOs in galaxy clusters	As predicted by Refsdal, strongly lensed time-variable sources provide an alternative and independent way to other cosmological
Marek Biesiada	Strong lensing - new opportunities in the era of big surveys and multimessenger astronomy	By now strong lensing has become a mature research field and brought important results both in extragalactic astronomy (study of
Martin Makler	Constraints on modified gravity using Einstein rings: prospects for the LSST era	Galaxy-galaxy strong lensing systems provide useful probes of general relativity, allowing us to constrain the ratio η of the two
Maverick Oh		The free-streaming length of dark matter is a key parameter that affects structure formation. In other words, fundamental properties of
Nandini Sahu	Is the Conflict Real? Testing Galaxy Formation and Dark Matter Models with Strong Gravitational Lenses at 0.3 < z < 0.9	Combining ground-based spectroscopy with Hubble imaging, the ASTRO 3D Galaxy Evolution with Lenses (AGEL) survey has
Pritom Mozumdar	Precise measurement of the Hubble constant using single apertures and spatially resolved kinematics.	The Hubble tension is one of the major unanswered questions in current physics with immense consequences, and time-delay
Sangjun Cha	MAximum-entropy ReconStruction (MARS): A New Strong-lensing Reconstruction Algorithm for the JWST Era	The MAximum-entropy ReconStruction (MARS) method is a free-form strong-lensing (SL) reconstruction algorithm, which adopts the
Sebastian Wagner-Carena	Machine Learning meets Hubble Data: Constraining Dark Matter with Strong Gravitational Lenses	Many of the alternative dark matter models significantly alter the abundance and distribution of collapsed, virialized structures (halos)
Suhail Dhawan	Strongly lensed supernovae; Discovery to cosmology in the LSST era	Strongly lensed supernovae are excellent, independent probes to measure the Hubble constant and weigh in on the Hubble tension. In
Tyler Hughes	The impacts of source light galaxy morphology on the performance of neural networks used for substructure detection.	Warm and cold dark matter models predict very different abundancies of dark matter substructure within the halos of galaxies.
Veronica Motta	Microlensing in 7 quadruply lensed quasars	The observation of gravitationally microlensed quasars provides direct measurements of the accretion disk structure. The flux