

Valencia Workshop on the Small-Scale Structure of the Universe and Self-Interacting Dark Matter

Tuesday 10 June 2025

Lensing (9:30-13:00)

time	[id] title	presenter
9:30	[17] Review talk: Strong lensing as a tool for measuring the properties of dark matter	NIERENBERG, Anna
10:10	[18] How 30+ quadruply-imaged quasars can constrain self-interacting dark matter	GILMAN, Daniel
10:30	[19] Exploring the identity of dark matter with galaxy strong lensing	LI, Ran
10:50	[20] CDM, SIDM or Baryons: Subhalo detection with simulation-based inference from galaxy-scale strong lenses	VON WIETERSHEIM-KRAMSTA, Maximilian
11:10	Coffee break	
11:50	[21] Interpretable Machine Learning for Constraining Self-Interacting Dark Matter in Galaxy Clusters	TREGIDGA, Ethan
12:02	[22] The role of Stellar Velocity Anisotropy and Dark Matter of Massive Ellipticals in H0 inference via Strong Lensing	VERMA, Vishal
12:14	[23] The “little dark dot”: Evidence for Self-Interacting Dark Matter in the Strong Lens SDSSJ0946+1006?	LI, Shubo
12:26	[80] The dense, low-mass perturbers in B1938+666 and J0946+1006: implications for cold and self-interacting dark matter	MARYAM, Tajalli

Lensing (15:15-18:20)

time	[id] title	presenter
15:15	[41] Is the dark substructure in lens J0946+1006 a core-collapsed SIDM subhalo?	MINOR, Quinn
15:35	[157] The overconcentrated dark halo in the strong lens SDSS J0946 + 1006 is a subhalo: evidence for self-interacting dark matter?	ENZI, Wolfgang
15:55	[165] Gravitational imaging detection of a 10^6 solar mass object in the strong lens system JVAS B1938+66	POWELL, Devon
16:15	[101] Emerging Opportunities to Resolve Challenging Observations through Self-Interacting Dark Matter with Mass Segregation	YANG, Daneng
16:35	Coffee break	
17:10	[43] Interacting dark matter dark energy scenarios	MENA, Olga
17:30	[167] Stress-testing CDM with cluster-lenses	NATARAJAN, Priya
17:50	[44] Moderated discussion	

Tuesday 17 June 2025

Lensing (9:30-13:20)

time	[id] title	presenter
9:30	[74] Review talk	VEGETTI, Simona
10:10	[99] Not so dark, not so dense: a reassessment of the lensing subhalo in SDSSJ0946+1006	ROBERTSON, Andrew
10:30	[159] Breaking the next frontier of SIDM with Euclid	HARVEY, David
10:50	[160] Measurements of dark matter distributions from galaxy clusters and constraints on dark matter	ADHIKARI, Susmita
11:10	Coffee break	
11:50	[78] Line-of-Sight Effects on the Brightest Cluster Galaxy Wobble	VECCHI, Felix
12:02	[79] Massive neutrinos, extra neutrinos, and other surprises in Λ CDM Cosmology	GARCIA ESCUDERO, Helena
12:14	[81] Moderated discussion	