

Session Program

18-22 Jul 2022



IDM 2022

Parallel 2D - Simulations/Cosmology

Tuesday 19 July

14:30

Parallel 2D - Simulations/Cosmology

Session | Location: EI10 | Convener: Julian Munoz

14:30-14:50 **Lyman-alpha constraints on non-cold dark matter**

Speaker

Deanna Hooper

14:50-15:10 **Can we see dark matter substructure with stellar streams?**

Speaker

James Alvey

15:10-15:30 **Fundamental dark matter physics with strong gravitational lenses**

Speakers

Dr Daniel Gilman, Daniel Gilman

15:30-15:50

Shedding light on low-mass subhalo survival with numerical simulations

Speaker

Alejandra Aguirre-Santaella

15:50-16:10 **Self-interacting dark matter on small and large scales**

Speaker

Dr Camila Correa

16:10-16:20

Characterizing DM substructures in strong lensing images with targeted simulation-based inference

Speaker

Noemi Anau Montel

16:20-16:30 **Vortice Classification in Ultra-light Dark Matter Halos**

Speaker

Pedro Bittar

16:30

17:00

Parallel 2D - Simulations/Cosmology

Session | Location: EI10 | Convener: Xiaoyong Chu

17:00-17:20 **Coherent to incoherent structures in fuzzy dark matter halos**

Speaker

Dr I-Kang (Gary) Liu

17:20-17:40 **Testing the mean field description of scalar field dark matter**

Speaker

Andrew Eberhardt

17:40-17:50 **Self-similar solutions for Fuzzy Dark Matter**

Speaker
Raquel Galazo

17:50-18:00

DarkHistory NN: Computing early universe exotic energy injection imprints with Neural Network

Speaker
Yitian Sun

18:00-18:20

Improved Treatment of Dark Matter Capture in Compact Stars

Speaker
Dr Sandra Robles

18:20-18:40

Bouncing Dark Matter

Speaker
Bibhushan Shakya

18:40-19:00

Mergers as a Probe of Particle Dark Matter

Speaker
Anupam Ray

19:00