

Session Program

5-9 Dec 2022

The Dark Side of the Universe DSU2022

Ultralight dark matter

Monday 5 December

14:00

Ultralight dark matter

Session | **Location:** Old Main Building, 229 | **Convener:** Benjamin Roberts

14:00–14:20

Proposals for searches of scalar field dark matter using cavity resonators and capacitors

Speaker

Dr Igor Samsonov

14:20–14:40

Dark matter detection via atomic interactions

Speaker

Ashlee Caddell

14:40–15:00

New optical clocks based on Cu II, Yb III, Hf II, Hf IV, and W VI ions which may be used to search for dark matter and variation of the fine structure constant

Speaker

Saleh Allehabi

15:00–15:20

Searching for new bosons in atomic spectra

Speaker

Pavel Fadeev

15:20–15:40

Searching for scalar field dark matter with hyperfine transitions in alkali atoms

Speaker

Andrew Mansour

15:40

16:10

Ultralight dark matter

Session | **Location:** Old Main Building, 229 | **Convener:** Igor Samsonov

16:10–16:30

Searching for ultralight scalar dark matter with muonium and muonic atoms

Speaker

Yevgeny Stadnik

16:30–16:50

Searches for axion dark matter at IBS-CAPP

Speaker

Dr SungWoo Youn

16:50–17:10

Axions in the post-inflationary scenario

Speaker

Giovanni Pierobon

17:10–17:30

Dynamical Friction from Ultralight Dark Matter

Speaker

You-Rong Frank Wang

17:30-17:50

Search for a Variation of the Fine Structure Constant around the Supermassive Black Hole in Our Galactic Centre

Speaker

Benjamin Roberts

17:50