

**Lorentz
center**

Workshop @Snellius

Light Anti-Nuclei as a Probe for New Physics

14 - 18 October 2019, Leiden, the Netherlands

Scientific Organizers

- Stefano Della Torre, INFN Sez. Milano-Bicocca
- Nicola Tomassetti, University of Perugia
- Manuela Vecchi, University of Groningen

Goal of this workshop

- Bring together scientists coming from different fields to talk about the experimental searches of CR antinuclei and their implications in the context of new physics scenarios.
- This workshop will be considered a success if:
 - it creates the opportunity to discuss and reflect on this topic
 - it initiates collaborations between the communities involved
 - young scientists get involved in the programmed topics
- As output of this event we also aim at a written report, describing the recent developments and future perspectives discussed during the week.

Workshop program

Monday	Tuesday	Wednesday	Thursday	Friday
Experimental searches for antinuclei	Sources of antinuclei	Antinuclei transport	Antinuclei production cross-sections	Cosmology and new physics

Two chairpersons per section:

- First name for managing the time and moderating the discussion;
- Second name for taking notes, useful for the discussion (use the shared google doc)

Round tables

Monday	Tuesday	Wednesday	Thursday	Friday
Experimental searches for antinuclei	Sources of antinuclei	Antinuclei transport	Antinuclei production cross-sections	Cosmology and new physics
	How to use the multi-messenger approach to target antimatter-dominated regions in the universe ?	Propagation of (anti)nuclei in the Galaxy and in the Heliosphere: what have we learned?	How can nuclear physics help us to unveil the origin of antimatter ?	

Breakout sessions

Monday	Tuesday	Wednesday	Thursday	Friday
Experimental searches for antinuclei	Sources of antinuclei	Antinuclei transport	Antinuclei production cross-sections	Cosmology and new physics
		The coalescence model in a nutshell.	Standard Cosmological Model in a nutshell.	

Indico page

We encourage you to upload your slides at the following indico page:

<https://indico.cern.ch/event/849055/>

Social events

Monday	Tuesday	Wednesday	Thursday	Friday
Wine & cheese welcome party: at 5:30 PM at Lorentz Center		Boat trip & social dinner: From 6:00 PM at Kaiserstraat 7 (map will be distributed)	Public lecture: 'Supernova's: Ancient cosmic firework, from historical impact to their present day aftermath'. At 18:30 - 19:30 at Rijksmuseum Boerhaave.	

Office space

Seven offices are available within the Lorentz center Snellius venue.
You can access them with the badge that you were given upon registration

Acknowledgements

Generous support from Lorentz center, Stichting Physica and NWO (The Dutch Research Council) means the meeting will have no registration fee, and lunch, conference dinner and excursion will be free.

Thank you for attending the workshop !