

## **News from ISAPP**

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## **Homepage and Coordinators**

https://www.isapp-schools.org

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ABOUT ISAPP. Since 2002, leading European institutions have advanced early-stage training in astroparticle physics through the International Schools on Astroparticle Physics (ISAPP). This initiative fosters student mobility, knowledge exchange, and research collaboration, offering PhD students and early career researchers the chance to engage with experts. ISAPP organizes annual intensive schools in various locations, offering an immersive experience that enhances doctoral training while sparking innovation, discovery, and global collaboration. As of early 2025, the network consists of 44 institutions and has organized 42 schools to date. With a curriculum shaped by the Vademecum, students dive into the most groundbreaking topics in astroparticle physics, from neutrino physics and dark matter to cosmic messengers and gravitational waves. ISAPP creates a platform where early career researchers come together to explore, innovate, and to prepare to drive the future of astroparticle physics.

<u>Highlights from 2024.</u> ISAPP hosted two summer schools that brought together doctoral students from around the world. The first, held in June-July at the University of Padua, Italy, focused on <u>"Particle Candidates for Dark Matter"</u>. Over eight days, 38 students explored dark matter theories, experimental searches, cosmology, and large-scale structure, while also enjoying social events and informal networking. The second school, in September, took place at the International Forum Burg Liebenzell in Germany organised by scientists from Karlsruhe Institute of Technology. The event <u>"Neutrinos and Dark Matter in the Lab and in the Universe"</u>, attended by 29 students, covered topics in neutrino physics, including cosmology, oscillation experiments, and dark matter searches. Both programs combined learning and collaboration, leaving a lasting impact on participants.





Group photos for the school in Padua (left) and Bad Liebenzell (right).

<u>What's next in 2025?</u> ISAPP is excited to announce two summer schools this year, each offering a deep dive into cutting-edge astrophysical topics. In June, the first school will take place in the beautiful Salento region of Italy at the University of Lecce, focusing on <u>"High-energy Cosmic Rays as Messengers from Space to the Ground"</u>. Participants will explore astrophysical sources and cosmic radiation through lectures and hands-on exercises. In July, the second school will be held in Vienna, centered on <u>"Gravitational Waves: From Theory to Detection"</u>. This program will cover topics like GW detectors, astrophysical sources, multimessenger astronomy, and quantum sensing, with lectures and interactive sessions.