Announcement for DIAS Summer School 2018

The second summer school on High-Energy Astrophysics organised by Dublin Institute for Advanced Studies (DIAS) will be held this summer from the 19-29 June 2018 in Dublin. The school is aimed at motivated researchers beginning their careers (in particular PhD students and young postdocs), with a focus on 'filling in the gap' between University education and University level research.

The rapid and exciting progress in the emerging interdisciplinary field of High-Energy Astrophysics is attracting ever-growing numbers of students and young researchers. However very few Universities or Research Centres are currently able to provide systematic courses on different aspects of this rapidly developing field for young researchers entering the field. The DIAS Summer School is an intensive 10 day, 28-lecture course that fills this gap by providing a coherent series of advanced lectures on:

- High Energy Phenomena in Astrophysics
- Non-Thermal Galactic and Extragalactic Sources
- Plasma Astrophysics
- Acceleration and Transport of Cosmic Rays
- Radiative Processes in Astrophysics
- Observational and Theoretical Cosmology

The lectures will be delivered by both world-renowned and young-upcoming researchers in the field. A set of pedagogical lectures in their areas of expertise will be provided, highlighting recent developments as well as a comprehensive introduction and overview. A book containing the lectures presented is planned to be published and provided afterwards to all students attending the school.

The director of the school, Felix Aharonian, is a professor at DIAS. The school will be hosted at Dublin City University (DCU), where accommodation and breakfast and lunch will be covered within the school fee of 950 Euros. DCU is a modern campus in North Dublin within easy reach of Dublin city centre, Dublin airport, and local transport hubs. Dublin is a vibrant European capital city, renowned for its welcoming and friendly atmosphere, its rich history and culture, live music and nightlife.

DIAS has played an important role in the development of high-energy astrophysics, from the investigation of cosmic rays on NASA's Long Duration Exposure Facility to our current participation in the HESS observatory. Former and current members of the DIAS school of cosmic physics have contributed to key advances in our understanding of the high-energy universe.

Students interested in attending the school are recommended to register their participation early: (<u>https://www.dias.ie/cappa/SummerSchool2018/</u>).

On behalf of the organisers,

Felix Aharonian, Jonathan Mackey, Masha Chernyakova, and Andrew Taylor