

# RadioNet support for scientific events

## Application form

EVENT INFORMATION	
TITLE	'Cosmic dust: origin, applications and implications' <a href="http://cphdust2018.nbi.ku.dk">http://cphdust2018.nbi.ku.dk</a>
PLACE	Copenhagen, Denmark
ORGANISER'S INSTITUTE NAME	Niels Bohr Institute, University of Copenhagen Darach Watson <darach@nbi.ku.dk>
DATE	11–15 June 2018
NO. OF PARTICIPANTS	200
TOTAL EVENT COST	€67000
RADIONET SUPPORT	€4000
OTHER SOURCES OF FUNDING	Conference fees: €52000 The Cosmic Dawn centre (NBI): €7000 Niels Bohr Foundation (NBI): €4000 University of Copenhagen: venue
REQUEST	
(max. 2 pages)	
Short abstract of the event	<p>#CPHDUST2018</p> <p>This conference is the fourth in a series held every five years on cosmic dust, following successful meetings in Colorado, USA (2003), in Heidelberg, Germany (2008), and in Taipei, Taiwan (2013).</p> <p>Despite its fundamental importance to so much of the cosmos, we still do not know where most dust originates, what its mineralogy is, what its properties in different environments are, or its physics and chemistry in the interstellar medium. These questions are under active study, and significant progress has been made over the past decade with new instrumentation, laboratory results, and theoretical modeling.</p> <p>This conference will bring together experts on dust and dust practitioners from all different backgrounds: meteoritics, interplanetary dust, protoplanets, star-formation, AGB stars and Planetary Nebulae, dust in galaxies, supernovae, and AGN.</p> <p>The conference is timed to lay out the remarkable progress on dust since the Herschel (pictured above) and Planck missions ended and their legacies have begun to be exploited, since ALMA began real science operations over the previous five years, and to prepare for the launch of JWST.</p>
Relevance for RadioNet	Cosmic dust, the smoke-like, sub-micron particles that dominate the condensed matter mass of the universe, is essential to nearly all aspects of modern astrophysics, astrochemistry and cosmology. Its study crosses the divide between laboratory, astronomical observation, and theory. The realisation of the central role of dust in the physics and chemistry of planet

	<p>formation, star formation, galaxy evolution, and supermassive black hole growth, means that the study of cosmic dust has moved to the heart of all of these subjects. This conference will broadly survey all aspects of cosmic dust, its origin and its properties, and its growing role as a unique tool for studying the physical processes that shape our Universe. This will be perfectly timed as the fourth of a series of large (~200 attendees), international dust meetings held every five years in North America, Europe, and Asia. The symposium will allow the whole community to come together to survey and organize the rapidly changing landscape of dust studies since the end of Herschel, Planck, and Spitzer, and the beginning of full science operations with ALMA, synthesise a coherent picture of our understanding of dust immediately prior to the launch of JWST and to help developing science cases for future facilities such as the SKA.</p> <p>The main rationale and relevance for a request for RadioNet support is that the conference directly concerns and involves those working with the scientific output from ALMA and other telescopes operating at long wavelengths – including the SKA in the long-term. The conference's programme covers ISM, observations of star-formation and late stage stellar evolution, as well as solar system science and galaxy evolution, early universe science, cosmology, and AGN. The conference also crosses over traditional subject divisions, bringing together laboratory, theory and observations, including observations from X-ray (dust scattering and fine structure spectroscopy), UV/optical, and infrared, through to radio wavelengths.</p>
Impact on RadioNet	<p>The proposal touches upon one of the key science cases for telescopes operating from submillimetre through centimetre wavelengths – namely on the properties and evolution of dust from the interstellar medium onto protoplanetary disks. In this sense, the conference provides an excellent venue to (i) educate astronomers working at different wavelengths about the progress made with the longer wavelength facilities and vice versa (ii) help radio astronomers in strengthening the science cases for, e.g., future programs at ALMA and the SKA.</p>
Use of the RadioNet contribution	<p>We will use the RadioNet (and NBF) contribution to help fund the subsistence costs and conference fee of invited speakers who are young, female, or from groups that are typically underrepresented at conferences in Europe. The purpose is to help ensure a good diversity in the attendees at the conference, especially among the invited speakers. In the current programme (TBC), possible offers could go to: Annalisa DeCia, Cornelia Jäger, Susanne Höfner, Margaret Meixner, Susanne Aalto, Raffaella Schneider, Gail Zasowski, Ilse de Looze, Kenji Bekki, Karin Sandstrom, Maud Galametz, Zahed Wahhaj, Hiroki Chihara, Sundar Srinivasan, Akio Inoue. But preference in these offers will be given in order of reverse seniority, e.g. DeCia or Wahhaj, who are postdocs, ahead of Meixner.</p> <p>The total cost varies per person depending on the travelling distance, but we expect an average of €1350 per person in subsistence expenses and fee for the conference.</p>
Ethics	<p>The SOC has followed the principles of gender and global diversity in the selection of invited speakers. We have been successful in this regard, with about half of our invited and review speakers from each gender. Our invited speakers come from Europe, North and South America, Asia, and Australia. We have a sub-committee of the SOC/LOC for ensuring the conference follows as closely as possible the ethical standards for the organisation of and professional conduct at meetings, set out in §2 of the European Astronomical Society's Ethics Statement. The chair of the conference SOC is a member of the EAS Working Group on Ethics that produced this report.</p>