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# Cosmic Dust from the Lab to the Stars Workshop

31 October – 4 November 2016

## Conveners

Jürgen Blum, IGEP, TU Braunschweig, Braunschweig, Germany  
Hsiang-Wen Hsu, LASP, Univ. of Colorado, Boulder, USA  
Detlef Koschny, ESA-ESTEC, Noordwijk, the Netherlands  
Anny-Chantal Levasseur-Regourd, UPMC, Sorbonne Universités and LATMOS-CNRS, Paris, France  
Jesus Martin-Pintado, INTA-CSIC, Madrid, Spain  
Rafael Rodrigo, International Space Science Institute, Bern, Switzerland  
Veerle Sterken, International Space Science Institute, Bern, Switzerland  
Andrew Westphal, Space Sciences Laboratory, Univ. of California at Berkeley, Berkeley, USA  
John Zarnecki, International Space Science Institute, Bern, Switzerland

Dust is ubiquitous – it is found from the Earth's atmosphere to the edges of our Universe. It is studied in many ways including in-situ measurement, remote observation (in our Solar System through to distant galaxies) and by analysis of returned samples. Progress in the last decade has been significant with sample return missions, in-situ measurements and ground- and space-based measurements, as well as progress in laboratory experiments and modeling. The possible significance of dust in the astrobiological context has also been realized. One of the challenges in the study of dust has been to harmonize the different techniques used in the study of dust and the various environments in which dust is found. It is now nearly 15 years since the last major book publication in the field (Interplanetary Dust, Grün et al., 2001). The time gap and the pace of development merits the next such initiative – now with an emphasis where possible on interconnections, similarities, differences and on synthesizing results from different techniques into one coherent view. A new aspect is that astrobiological connections will also be considered. Moreover, the dust hazard, and future technology and space mission requirements and scenarios will also be addressed. The outcome would be a compendium with a coherent view on dust from the different disciplines involved in cosmic dust science and recommendations for future dust research and space missions.