

## **Introduction of Univ.-Prof. Dr. Bernadett Weinzierl**

Bernadett Weinzierl is atmospheric and aerosol physicist. She obtained her doctorate at the Faculty of Physics at the Ludwig-Maximilians-Universität (LMU), München, in 2008. She subsequently held research posts at the Deutsches Zentrum für Luft- und Raumfahrt (German Aerospace Center; DLR), was a visiting scientist at the National Oceanic and Atmospheric Administration's Earth System Research Laboratory (NOAA-ESRL) in Boulder, Colorado (USA) and worked for Droplet Measurement Technologies Inc. (DMT) in the same city. In 2010 she was chosen to head the joint DLR-LMU-Helmholtz Young Investigator's Group AerCARE and became a Junior Professor in the Faculty of Physics at LMU in 2011.

Her present research focuses on the airborne investigation of aerosol long-range transport, elevated aerosol layers, and the characterization of microphysical and optical aerosol properties. In 2010, she performed unique measurements in the volcanic ash layers from the Eyjafjalla volcano (Iceland), and her volcanic ash work provided fundamental input to the International Civil Aviation Organization (ICAO) for developing guidelines to prevent aviation from being affected by volcanic ash. In 2013, she coordinated the SALTRACE (<http://www.pa.op.dlr.de/saltrace/>) aircraft field experiment which investigated the transport of mineral dust from Africa into the Caribbean. SALTRACE involved scientists from Europe, Cabo Verde, the Caribbean and the US, and the SALTRACE measurements were by far the most extensive ever made on long-range transported African dust.

The scientific work of Bernadett Weinzierl was recognized with several honors and awards such as the Therese-von-Bayern Award for outstanding young scientists (2009), the DLR Science Award (2013), invitations to Frontiers of Science Symposia organized by the Humboldt Foundation (2013, 2015), and memberships in the Think Tank "Stiftung Neue Verantwortung" (2011-2012) and in the "Junge Akademie" (2014-2019) at the Berlin-Brandenburg Academy of Sciences and Humanities and the German National Academy of Sciences Leopoldina. In 2014, she received one of the prestigious Starting Grants (1.99 Mio €) administered by the European Research Council (ERC) to investigate the properties of absorbing aerosol layers such as mineral dust and black carbon and to study their interaction with the radiation budget and atmospheric dynamics.