



Leibniz Institute for  
Tropospheric Research

## Staubtag 2018

### **Oral Program (28 November 2018)**

| <b>Time</b> | <b>Title</b>   | <b>Presented by</b>             |
|-------------|--|---------------------------------|
| 08:30       | <i>Welcome Reception, Poster Setup</i>   |                                 |
| 09:00       | Welcome and introduction to COST action inDust   | Konrad Kandler<br>Ina Tegen     |
| 09:15       | Aircraft observations of dust coarse and giant particles during transport, and importance for size, mass and optical properties  | Claire Ryder                    |
| 09:45       | The A-LIFE field experiment in the Eastern Mediterranean – Studying mixtures of absorbing aerosols   | Bernadett Weinzierl             |
| 10:00       | Immersion freezing activity of natural desert dust and its relationship to their mineralogical composition   | Romy Fösig                      |
| 10:15       | The impact of agricultural dusts on cloud ice formation – Searching for the root cause   | Isabelle Steinke                |
| 10:30       | Atmospheric aerosol, CCN and INP in the dusty region of the Cape Verde islands   | Xianda Gong                     |
| 10:45       | <i>Coffee break</i>  |                                 |
| 11:15       | Identifying wintertime African mineral dust sources and analysing their elemental composition  | Natalie Bakker                  |
| 11:45       | Monitoring dust geochemical composition of Saharan dust deposited on the West African margin for paleoclimate purposes   | Meryll LeQuilleuc               |
| 12:00       | An attempt to discriminate geogenic and anthropogenic signals in Saharan dust using Pb isotopes  | Sylvie Philippe                 |
| 12:15       | Dust source for the Amazon rain forest   | Damien Guinoiseau               |
| 12:30       | Monitoring dust depositions in the south and west of Iran  | Mansour Ahmadi<br>Foroushani    |
| 12:45       | Dry deposition sampling of mineral dust aerosol particles using passive and active samplers in a dust transport region (Tenerife): Results from single-particle characterization | Andebo Waza                     |
| 13:00       | <i>Lunch break &amp; Poster session</i>  |                                 |
| 14:45       | The ancient dust-reservoirs of the Atacama desert  | Tibor Dunai                     |
| 15:15       | Dust in Iceland and Antarctica   | Pavla Dagsson-<br>Waldhauserova |
| 15:30       | FRAGMENT: FRontiers in dust minerAlOgical coMposition and its Effects upoN climaTe   | Martina Klose                   |
| 15:45       | Assessment of the applicability of two commonly used dust emission schemes for estimating fire-driven dust emissions   | Robert Wagner                   |

| <i>Time</i> | <i>Title</i>   | <i>Presented by</i>                  |
|-------------|--|--------------------------------------|
| 16:00       | Sensitivity of the colour of dust in MSG-SEVIRI desert dust infrared imagery to surface and atmospheric conditions | Jamie Banks                          |
| 16:15       | <i>Coffee Break</i>  |                                      |
| 16:45       | Identification of dust sources in a Saharan dust hot-spot and their implementation into a dust-emission model      | Stefanie Feuerstein                  |
| 17:00       | Regional modelling of the impact of Saharan dust on atmospheric ice nucleation                                     | Bernd Heinold                        |
| 17:15       | From dust to ice – Estimation of ice nucleating particles within a dust layer                                      | Moritz Haarig                        |
| 17:30       | Radiative effects of long-range transported Saharan air layers as determined from airborne lidar measurements      | Manuel Gutleben                      |
| 17:45       | Towards quantification of the dust impact on ice formation in altocumulus and cirrus layers                        | Albert Ansmann                       |
| 18:00       | Dust over the coastal site Haifa   | Dietrich Althausen                   |
| 18:15       | Closing remarks and outlook  | Konrad Kandler<br>Kerstin Schepanski |
| 20:00       | <i>Dinner at restaurant 'Sitte'</i>  |                                      |

### **Poster Contributions**

| <i>Title</i>  | <i>Presented by</i>     |
|---|-------------------------|
| Assessment of the mineral dust related reduction of photovoltaic power generation in Central Europe with ICON-ART                 | Vanessa Bachmann        |
| Dust emission from European cropland  | Matthias Faust          |
| Modelling Namibian dust emission in the framework of AEROCLO-sA   | Stefanie Feuerstein     |
| Loess formation processes and inferences for paleoclimate reconstruction: cautionary tales from the Ili Basin loess, Central Asia | Kathryn Fitzsimmons     |
| EarthCARE-relevant aerosol classification applied on CyCARE ground-based lidar measurements                                       | Athina Avgousta Floutsi |
| The unresolved questions about mineral dust   | Moritz Haarig           |
| DUST.ES: Addressing key uncertainties in mineral DUST EmiSsion modelling to better constrain the global dust cycle                | Martina Klose           |
| Mineral dust in paleo-climate simulations of the last glacial   | Anne Kubin              |
| Mineral dust during the last glacial – Simulations with a comprehensive earth system model  | Ute Merkel              |
| Wind-driven emission of Enterococcus faecium from agricultural soils fertilized with poultry manure                               | Nadine Thiel            |
| Loess sequences in the southern Caucasus – A challenging archive for reconstructing the Middle to Late Pleistocene                | Tilman Wolpert          |

### **Venues**

|                    |                     |   |                     |
|--------------------|---------------------|---|---------------------|
| Arrival Dinner     | 27.11.2018<br>19:00 | Brauhaus Grohe, großer Saal<br>Nieder-Ramstädter Str. 3, 64283 Darmstadt<br><a href="https://goo.gl/maps/Gbfp7bBav9w">https://goo.gl/maps/Gbfp7bBav9w</a> | N 49.8747, E 8.6605 |
| Workshop<br>Venue  | 28.11.2018<br>08:30 | Room 18, building S3   20<br>Rundeturmstraße 10, 64283 Darmstadt<br><a href="https://goo.gl/maps/jq4NbJs3QbJ2">https://goo.gl/maps/jq4NbJs3QbJ2</a>       | N 49.8696, E 8.6562 |
| Staubtag<br>Dinner | 28.11.2018<br>20:00 | Restaurant Sitte<br>Karlstraße 15, 64283 Darmstadt<br><a href="https://goo.gl/maps/UiLNiL3B1hN2">https://goo.gl/maps/UiLNiL3B1hN2</a>                     | N 49.8692, E 8.6569 |

### ***List of participants***

|                              |                     |                      |
|------------------------------|---------------------|----------------------|
| Althausen, Dietrich          | Gasteiger, Josef    | Schepanski, Kerstin  |
| Ansmann, Albert              | Gong, Xianda        | Scheuven, Dirk       |
| Bachmann, Vanessa            | Groß, Silke         | Schneiders, Kilian   |
| Bakker, Natalie              | Guinoiseau, Damien  | Schöberl, Manuel     |
| Banks, Jamie                 | Gutleben, Manuel    | Steinke, Isabelle    |
| Benker, Nathalie             | Haarig, Moritz      | Sudharaj, Aryasree   |
| Bory, Aloys                  | Heimerl, Katharina  | Tegen, Ina           |
| Dagsson-Waldhauserova, Pavla | Heinold, Bernd      | Teri, Marilena       |
| Dunai, Tibor                 | Heuser, Johannes    | Thiel, Nadine        |
| Ebert, Martin                | Kandler, Konrad     | Toledano, Carlos     |
| Erba, Michelle               | Kasper, Judith      | Wagner, Robert       |
| Eriksen Hammer, Stine        | Klose, Martina      | Walser, Adrian       |
| Faust, Matthias              | Kubin, Anne         | Wandinger, Ulla      |
| Feuerstein, Stefanie         | Le Quilleuc, Meryll | Waza, Andebo         |
| Fitzsimmons, Kathryn         | Merkel, Ute         | Weger, Michael       |
| Floutsi, Athin Avgousta      | Panta, Agnesh       | Weinbruch, Stephan   |
| Foroushani, Mansour Ahmadi   | Pantillon, Florian  | Weinzierl, Bernadett |
| Fösig, Romy                  | Philippe, Sylvie    | Werner, Martin       |
| Freudenthaler, Volker        | Ryder, Claire       | Wolpert, Tilmann     |
| Galer, Stephen               | Samaras, Stefanos   |                      |