

DFG SPP 1294 "HALO"
Topical workshop



Ice crystal concentrations: measurements, retrievals, sensitivities

19 – 21 September 2018

Location: University of Leipzig, Bibliotheca Albertina,
Beethovenstr. 6, Leipzig (see map below)

Organizers: Johannes Quaas, University of Leipzig
Martina Krämer, FZ Jülich



Programme

Wed, 19 September 2018

Chair: Martina Krämer

- 12.45 h Welcome, opening remarks
- 13.00 h Ice microphysics (Bernd Kärcher)
- 13.45 h Physical processes controlling ice concentrations (Eric Jensen)
- 14.30 h Discussion
- 15.00 h Coffee

Chair: Johannes Quaas

- 15.30 h Uncertainties in ice cloud microphysical properties and processes
(Greg McFarquhar)
- 16.15 h Cirrus in-situ observations and large-scale simulations (Martina Krämer)
- 17.00 h Remote sensing of ice microphysics: Active remote sensing (Silke Groß)
- 17.30 h Discussion
- 18.00 h End of day 1

Thu, 20 September 2018

Chair: Christian Rolf

- 9.00 h Remote sensing of ice microphysics: Ice number concentration
(Odran Sourdeval)
- 9.30 h Ice nucleation (Frank Stratmann)
- 10.15 h Discussion
- 10.30 h Coffee

Chair: Odran Sourdeval

- 11.00 h Observations of INP (Joachim Curtius)
- 11.45 h Observations of upper-tropospheric CCN (Bernadett Weinzierl)
- 12.30 h Discussion
- 13.00 h Lunch break (Sandwiches)

Chair: Yvonne Boose

- 14.00 h A brief overview on atmospheric INP (Heike Wex)
14.20 h Retrieval of ice crystal number concentration from combined ground-based observations with Doppler polarization cloud radar, polarization lidar, and Doppler lidar (Johannes Bühl)
14.40 h Closure between INPC and ICNC in altocumulus and cirrus layers embedded in Saharan dust (Albert Ansmann)
15.00 h Discussion
15.20 h Coffee

Chair: Patric Seifert

- 15.50 h Arctic ice clouds over northern Sweden: microphysical properties studied with the Balloon-borne Ice Cloud particle Imager B-ICI (Veronika Wolf)
16.10 h In-situ measurements of cirrus and contrails in mid-latitudes: results from the ML-CIRRUS and ECLIF missions (Christiane Voigt)
16.30 h Examining inter-particle distance distributions in cirrus clouds with in-line holography (Oliver Schlenker)
16.50 h Parameterizing ice formation in cirrus clouds based on laboratory studies (Isabelle Steinke)
17.10 h Discussion
17.30 h End of day 2

Fri, 21 September 2018

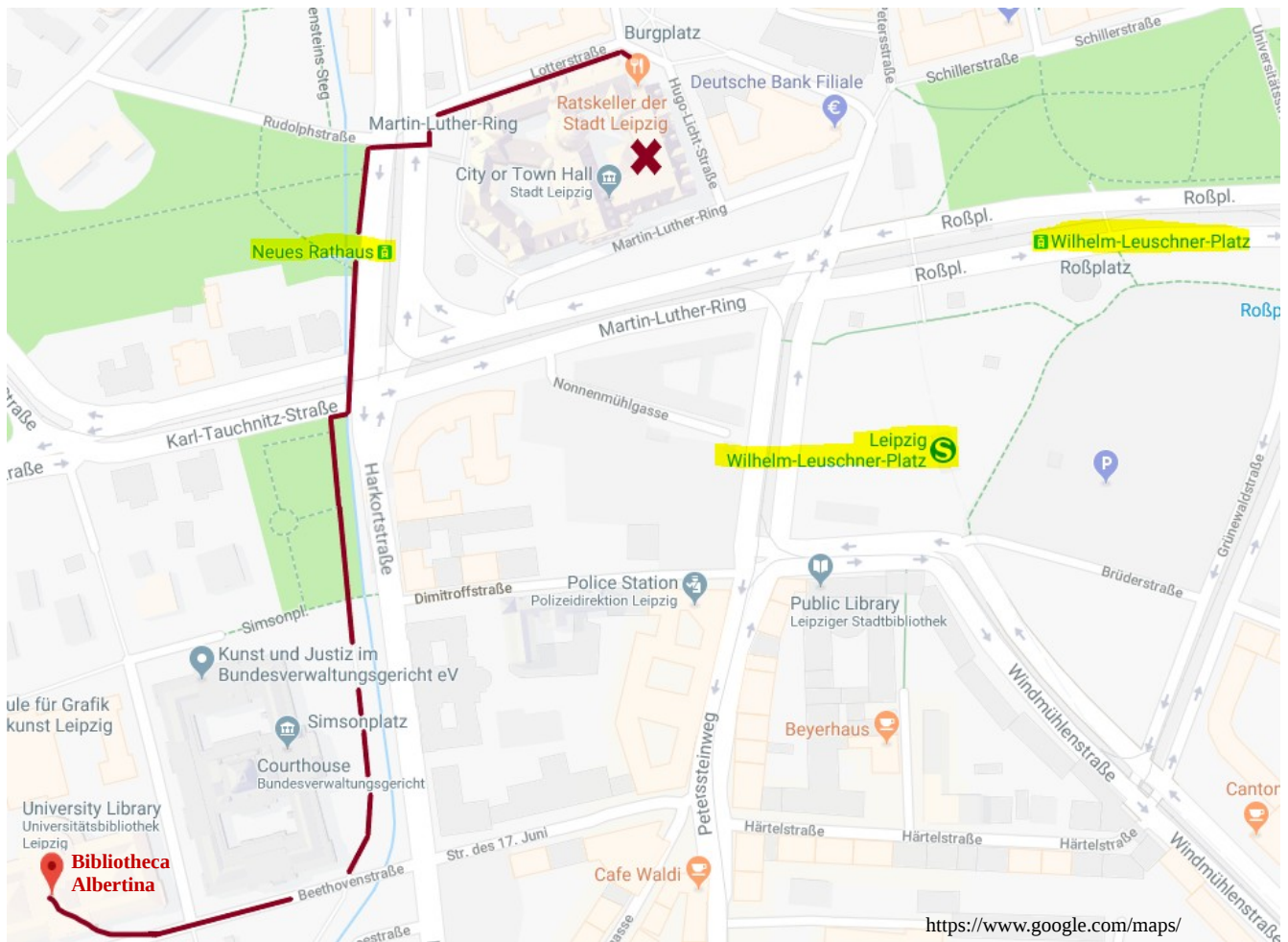
Chair: Johannes Mülmenstädt

- 9.00 h Cirrus outflow of warm conveyor belts (Tim Lüttmer)
9.20 h Ice crystal number concentrations in natural cirrus and contrail perturbed cirrus – Large Eddy Simulations with a Lagrangian ice microphysics code (Simon Unterstrasser)
9.40 h Analysis of recalculated ice nucleation rates (Jonas Hessemann)
10.00 h Discussion
10.30 h Coffee

Chair: Ioanna Arka

- 11.00 h Implementation of a comprehensive ice crystal formation parameterization into the EMAC model and some sensitivity studies (Sarah Bacer)
11.20 h Aerosol-induced cirrus formation in the EMAC (MADE3) global model (Matthia Righi, Christof Beer)
11.40 h Discussion
12.00 h Next steps, Outlook
12.30 h End of meeting

How to get to Bibliotheca Albertina and the Ratskeller Leipzig (workshop dinner)?



Bibliotheca Albertina (University Library) : Take Tram 8, 9, 10, 11, or 14 to “Wilhelm-Leuschner-Platz” or to “Neues Rathaus”, or S-Bahn to “Wilhelm-Leuschner-Platz” and walk Martin-Luther-Ring towards Harkortstraße; turn to the right into Beethovenstraße. The building on the corner is the federal administrative court, the second big building on the right-hand-side is the **Bibliotheca Albertina** where the workshop takes place.

Phone numbers:

Johannes mobile: +491739508429

Library: +493419730577

Institute secretary: +493419732850

Dinner in the "Ratskeller Leipzig", Wednesday, 19 September 2018, 20:30 h

You can walk directly from the Bibliotheca Albertina: Go out of the Bibliotheca Albertina, turn to the left and walk Beethovenstraße towards Harkortstraße; turn left into Harkortstraße and walk towards Karl-Tauchnitz-Straße; cross the street and enter Martin-Luther-Ring straight ahead; walk Martin-Luther-Ring towards Lotterstraße; turn to the right into Lotterstraße; walk Lotterstraße until Burgplatz; on the right-hand-side is the Ratskeller Leipzig (marked with a red cross).

