

## Monday, 10th of November

12:00 – 12:20 Opening words, A111 Exactum

12:20 – 13:00 Plenary talk

*Chair: Daniel Köhler*

**Harri Kokkola,**

*Modelling the Aerosol Effects on Radiation, Clouds, and Climate*

13:00 – 13:30 Oral Presentations

**Outi Meinander,** *Dust in the Arctic: Interactions between climate, dust, and ecosystems*

**Iolanda Ialongo,** *Assessing air pollution and GHG emissions from the mining industry using satellite observations*

13:30 – 14:00 Coffee break

14:00 – 15:30 Oral Presentations

*Chairs: Outi Kinnunen & Aliisa Ojala*

**Henri Oikarinen,** *Review of emissions from fuel operated auxiliary heaters*

**Luis Barreira,** *Size-dependent light absorption of traffic aerosols and potential contributions from non-exhaust sources*

**Mikhail Sofiev,** *New developments in Vegetation Fires and Smoke Pollution - Warning and Advisory System for Europe*

**André Welti,** *Ice nucleating particles from the Baltic Sea*

**Tea Thum,** *Using optical observations to evaluate the carbon and nitrogen cycles in a terrestrial biosphere model*

**Yuwen Zhang,** *Does physiology alone explain betula pendula recovery from drought?*

15:30 – 15:50 Short break

15:50 – 16:30 Plenary talk

*Chairs: Taiwo Ashu & Celestine Oliewo*

**Hilppa Gregow,**

*The Next Frontier in Climate Science*

16:30 – 17:15 Oral Presentations

**Reija Ruuhela,** *Disproportionally distributed heat stress in urban areas - a case study on urban climate and segregation trends in Helsinki*

**Heikki Järvinen,** *Destination Earth Climate Adaptation Digital Twin: Enhancing usability of the Service by Earth Observation Projections*

**Syamili Manoj Santhi,** *Perceived Happiness in Finnish Forests*

17:15 Group photo

17:30 – 18:30 Poster session 1 at Dynamicum, FMI

18:30 Dinner at Dynamicum, FMI

## Tuesday, 11th of November

09:00 – 09:40 Plenary talk, A111 Exactum

*Chairs: Hilla-Maria Myllynen & Teemu Lepistö*

**Panu Karjalainen,**

*Ten Years of Mobile Aerosol Measurements with ATMo-Lab and Future Outlook*

09:40 – 10:35 Oral Presentations

**Rostislav Kouznetsov,** *Deposition velocity concept does not apply to fluxes of ambient aerosols*

**Snehitha Kommula,** *Aerosol emissions from prescribed fires in the European boreal forest: field and laboratory measurements*

**Suman Basyal,** *Nucleation mode particles from traffic: distinguishing from observation data*

**Igor Esau,** *Application of the local climate zone (LCZ) concept in multi-scale model studies of urban micro-climates*

10:35 – 11:05 Coffee break

11:05 – 12:35 Oral Presentations

*Chairs: Emelda Ahongshangbam & Antti Vartiainen*

**Federico Bianchi & Myriam Agro',** *New particle formation at high altitude: insights from the Izaña Atmospheric Observatory*

**Maitane Iturrate-Garcia,** *Calibration strategies for particulate matter low-cost sensors - a metrological perspective*

**Teemu Lepistö,** *Investigating the dispersion of ultrafine particles from an airport*

**Antti Hyvärinen,** *Long term measurements of aerosol activation in low level clouds in northern Finland*

**Anette Karppinen,** *Volatile organic compounds in an underground mine environment*

**Ville Silvonen,** *Indoor Concentrations and Infiltration of Outdoor Black Carbon*

12:35 – 13:35 Lunch (Self paid)

13:35 – 14:15 Plenary talk

*Chairs: Maximilian King & Haitong Zhang*

**Kristiina Karhu,**

*Soil carbon and climate change - from threats to solutions*

14:15 – 15:10 Oral Presentations

**Liisa Kulmala,** *Towards operational monitoring of agricultural carbon sequestration – testing monitoring prototypes with flux data*

**Topi Laanti,** *Diffuse Radiation Effect on Ecosystem Carbon Uptake of Boreal Forest: A Machine Learning Approach*

**Andrew Twelves,** *Sensitivity of Bothnian Bay carbon fluxes to Kemijoki nutrient loads: Experiments with NEMO-ERGOM*

**Antti Vartiainen,** *Neural Network-Based Bias Correction of a Monoterpene Oxidation Scheme for Global-Scale Models*

15:10 – 16:40 Poster session 2 at Dynamicum, FMI

16:40 – 18:00 Oral Presentations, A111 Exactum

*Chairs: Samuel Chua & Eleonora Favaro*

**Emelda Ahongshangbam,** *Gas phase formation of trioxo acid via OH-initiated aldehyde oxidation in the atmosphere*

**Kenneth Peltokangas,** *New climate experts – Meeting the societal need for climate experts*

**Jian Zhao,** *Intercomparison of advanced mass spectrometer systems for near-molecular-level characterization of organic aerosol in Hyytiälä, Finland*

**Teemu Salminen,** *Simultaneous MPSS data inversion and aerosol process rate estimation with uncertainty quantification via Bayesian state-space methods*

**Juha A. Karhu,** *Projections for solar photovoltaic energy production in Northern Europe under changing snow conditions*

## Wednesday, 12th of November

09:00 – 09:40 Plenary talk, A111 Exactum

*Chairs: Jian Zhao & Diana Pereira*

***Silja Häme,***

*The national Integrated Atmospheric and Earth System Research Infrastructure (INAR RI) and its ACTRIS Finland component: Advancing Atmospheric and Environmental Research*

09:40 – 10:35 Oral Presentations

***Vivien Reh,*** *Climate tipping point science in the international climate regime- a comparative analysis*

***Pauliina Schiestl-Aalto,*** *Three decades of SMEAR II - Prerequisites for a long-term measurement station*

***Antti-Ilari Partanen,*** *Aligning Remaining Greenhouse Gas Budgets with National Inventories*

***Otso Peräkylä,*** *RO2 Radical Fates in Chamber Experiments*

10:35 – 11:05 Coffee break

11:05 – 12:35 Oral Presentations

*Chairs: Vivien Reh & Joona Cornér*

***Alexander Baklanov,*** *Climate Change and Northern Cities: Hazards, Processes, Impacts, Risks and Solutions for Resilient and Sustainable Developments*

***Victoria Sinclair,*** *Insights into Future Extreme Windstorms*

***Anton Laakso,*** *Climate extremes from different climate model datasets*

***Erkka Rinne,*** *Surface energy balance and related biophysical properties of northern boreal ecosystems*

***Henri Jokinen & Ville Leinonen,*** *Two years of Pirkanmaa Climate Action Lab - open discussion and co-development of regional climate action*

***Markku Kulmala,*** *CarbonSink+*

12:35 – 12:50 Closing words