

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 trioxy 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