



PHYSMOD 2026- International Workshop

Programme

organized by



ACKNOWLEDGEMENTS

We would like to thank the authors and members of the scientific committee on creating Physmod 2026 as a successful event.

ORGANIZING TEAM

David Janke, Jessica Lietze, Josefine Karl, Friedrich von Kracht

INTERNATIONAL SCIENTIFIC COMMITTEE

Bernd Leitzl, Chun-Ho Liu, Štěpán Nosek, Laurent Perret, Alan Robins, Pietro Salizzoni, Eric Savory, Tom Spicer, Stephan Van den Akker, Marton Balczo, David Birch, Matteo Carpentieri, Ariane Emmanuelli, Sofia Fellini, Stefanie Gillmeier, Frank Harms, Thomas Huret, Klára Jurčáková, David Janke

PROGRAMME – August 25, 2026

12:30 a.m.	Registration	Foyer CIRCLE
01:00 p.m.	Welcome and Opening	Room Z003
01:30-03:00 p.m.	Session 1: Data, Quality and Transferability in Physical Modelling	Room Z003
Do We Need a Publication Standard for Data from Boundary Layer Wind Tunnel Modeling? <i>B. Leidl, V. Voss, F. Harms</i>		Room Z003
How Accurate Is Our In-Situ Measurement? Effect of Tower Structures on Meteorological Tower Measurements on Wind and Turbulence: A Case Study of Hamburg Weather Mast <i>H.L. Chang, F. Harms, B. Leidl</i>		Room Z003
Structure of the Turbulent Wakes Downstream of Spires Configurations <i>T. Huret, P. Haquin, A. Baretter</i>		Room Z003
Modelling Kinetic Plume Displacement in Urban Settings - beyond Gary A. Briggs <i>S. van den Akker</i>		Room Z003
03:00-03:15 p.m.	Poster Elevator Talks	Room Z003
Impact of Solar Power Plant Geometry on Ground Level Convective Regimes: a Wind Tunnel Study <i>J. Clar, J. Garnier, M. Poulain-Zarcos, R. Knikker, H. Pabiou, P. Salizzoni</i>		Room Z003
Experimental Investigation of Pollutant Re-introduction through Ventilation Openings in a Mechanically Ventilated Building <i>S. Gillmeier, A.K.R. Jayakumari, R. Guichard, A. Bahloul</i>		Room Z003

03:15 p.m. Coffee Break

03:30 p.m.	Guided Tour of ATB and Wind-Tunnel Facilities
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05:00 p.m. Coffee Break

05:15 p.m.	Interactive Discussion	Room Z003
06:30 p.m.	Plenary Wrap-Up and Logistics	Room Z003

07:00 p.m. Welcome Reception, Mingling and Fireside Chat at the Foyer CIRCLE

09:00 p.m. Bus shuttle from ATB to Potsdam city centre

PROGRAMME – August 26, 2026

08:30 a.m.	Registration	Foyer CIRCLE
09:00 a.m.	Keynote: Current topics in experimental boundary layer meteorology <i>F. Beyrich</i>	Room Z003
09:45 a.m.	Session 2: Quality Assurance and Improvement of Experimental Techniques	Room Z003
Diode Laser Absorption Measurements for Wind Tunnel Dispersion Studies <i>K. Munusamy, P. Hayden, D. M. Birch</i>		Room Z003
Dynamic Calibration of a Pellistor-Based Concentration Probe <i>P. Hayden, P. Nathan, D. Draycott and D. M. Birch</i>		Room Z003
Feasibility of Volumetric PTV for the Characterization of a Tree Wake in an Atmospheric Wind Tunnel <i>L. Grandoni, M. Michard, N. Grosjean, P. Salizzoni</i>		Room Z003
3D3C Velocity Reconstruction around an Isolated Cubic Building Model Integrating Single-Camera Rainbow PTV and PINNs <i>H. Kikumoto, M. Takeyama, K. Nakao, Y. Takakuwa, Y. Wang</i>		Room Z003
Data-Driven Reconstruction from Sparse SPIV/HWA Measurements <i>H. Du, E. Savory, L. Perret</i>		Room Z003

11:45 a.m. Lunch Break

01:00 p.m.	Session 3: Atmospheric Boundary Layer: Turbulence and Canopy Transport	Room Z003
Wind Tunnel Study of Wind Flow over Low- to High-Rise Building Arrays Using PIV and POD Analysis <i>Z. Mo, Y. Zhang, F. Li, C.-H. Liu</i>		Room Z003
Quadrant Analysis of Turbulent Scalar Flux Contributions in Two-Height Canopy Flow <i>V. Babin, L. Shig, A. Liberzon, Y. Bohbot-Raviv</i>		Room Z003
Proper Orthogonal Decomposition of Flows and Turbulence over Urban Areas: A Wind Tunnel Approach <i>X. Wang, N. Cy Chan, and C.-H. Liu</i>		Room Z003
Intermittency and Multiscale Structure of Atmospheric Surface Layer Turbulence <i>R. Wang, C.-H. Liu</i>		Room Z003

02:30 p.m. Coffee Break

02:50 p.m.	Session 4: Transient Properties and Buoyancy Effects of Dispersion Processes	Room Z003
Puff-Discharged Pollutant Dispersion at the Boundary Layer – Comparison Between Flat- and Rough-Surface Conditions <i>K. Nakao, H. Ono</i>		Room Z003
Turbulence and Mixing in Buoyant Plumes from Ground Level Sources <i>C. Deebank, M. Placidi, M. Carpentieri</i>		Room Z003
Dynamics and Turbulent Transport in Wall-Heated Atmospheric Gravity Currents <i>S. Lanzini, M. Marro, S. Vaux, M. Creyssels, P. Salizzoni</i>		Room Z003

<i>Atmospheric Stability Effects on Pollutant Concentrations in Urban Blocks: Wind-Tunnel Experiments with Multiple Urban Morphologies</i> <i>R. Yoshie, T. Tachibana</i>	Room Z003
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04:20 p.m. **Coffee Break**

04:40 p.m.	OOP/ Big Fails Discussion	Room Z003
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05:30 p.m. **Bus shuttle from ATB to Potsdam Tour**

06:00 p.m. **Social Event: Tour through Park Sanssouci**

07:30 p.m. **Dinner at Wiener Café in Potsdam City**

PROGRAMME – August 27, 2026

08:30 a.m.	Registration	Foyer CIRCLE
09:00 a.m.	Session 5: Flow and Dispersion in the Built Environment I	Room Z003
	<i>Wind Tunnel Study on the Effects of Trees, Wind Direction, and Street Intersections on Street Canyon Flow</i> <i>A.V. Del Ponte, P. Salizzoni, M. Marro, L. Soulhac, L. Ridolfi, S. Fellini</i>	Room Z003
	<i>Beyond Flat Terrain: The Role of Topography in Urban Airflow and Pollutant Dispersion</i> <i>N. Taouil, N. A. A. Bakar, H.D.Lim, M. Jadidi, M. Azarpeyvand</i>	Room Z003
	<i>Temporal Fluctuations of Pollutant Concentration in a Street Canyon</i> <i>M. Pang, Evyatar Erell, C. Gromke</i>	Room Z003
	<i>Impact of Trees on Pollutant Transport in Real Urban Street Canyons: Case Study of Legerova Street, Prague</i> <i>Š. Nosek, M. Jakubcová, H. Chaloupecká, R. Kellnerová, Z. Jaňour</i>	Room Z003

10:30 a.m. **Coffee Break**

10:50 a.m.	Session 6: Validation of Numerical and Analytical Models	Room Z003
	<i>Buoyant Flows and Pollutant Dispersion in Three-Dimensional Street Canyons</i> <i>B.E. Owolabi, Š. Nosek, V. Fuka</i>	Room Z003
	<i>Wind Tunnel Benchmarking and CFD Validation of Wind-Driven Ventilation in a Scaled Naturally Ventilated Livestock Building</i> <i>L. Chen, L. Thormann, T. Amon, D. Janke</i>	Room Z003
	<i>Improving Air Quality in Residential Areas by Improving the Release of Emissions from Small Fireplaces</i> <i>F. Harms, C. Kalender, B. Leitl</i>	Room Z003
	<i>Aerodynamic Impacts of Urban Trees: CFD Simulations of Periodic vs. Aperiodic Pollutant Dispersion</i> <i>I. Troll, G. Kristóf, B. Papp</i>	Room Z003

12:20 a.m. Lunch Break

01:15 p.m.	Session 7: Flow and Dispersion in the Built Environment II	Room Z003
	Convective Transfer Optimization Applied to Agrivoltaic: A Wind Tunnel Study J. Garnier, M. Poulain-Zarcos, R. Knikker, H. Pabiou, P. Salizzoni	Room Z003
	Influence of Sloped Terrain on Chimney Plume Behavior and Air Quality in Residential Environments A. Montes	Room Z003
	Flow and Dispersion Through Tall Building Clusters M. Carpentieri, A. Mishra, D. Bi, P. Hayden, M. Placidi	Room Z003
	Airflow Rate Measurement of a Naturally Ventilated Livestock Building Based on an Atmospheric Boundary Layer Wind Tunnel X. Wu, D. Janke, T. Amon, Q. Yi	Room Z003

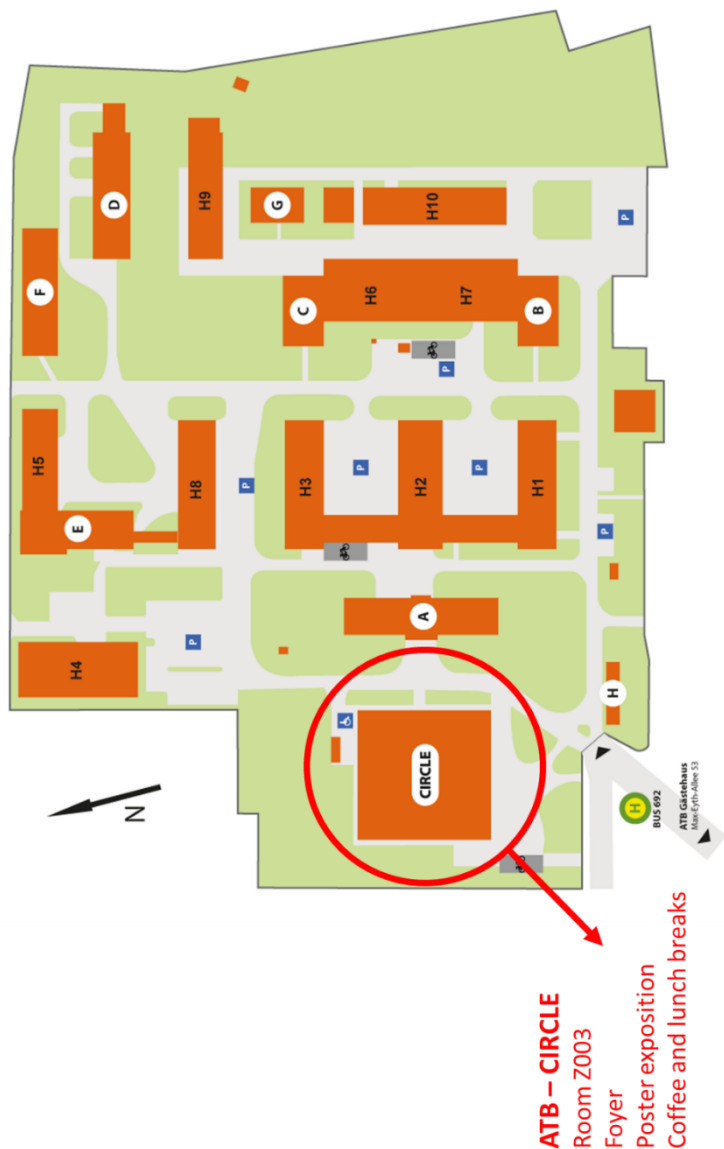
02:45 p.m. Coffee Break

03:00 p.m.	Session 8: Applied Dispersion Modelling for Exposure and Consequence Assessment	Room Z003
	Preliminary Wind Tunnel Tests Supporting Carbon Dioxide Pipeline Consequence Assessment Modeling T. Spicer, A. Fowler, B. Miklos, C.T. Smith	Room Z003
	Wind-Tunnel Analysis of Exhaust Dispersion and Exposure Risks on a generic Service Offshore Vessel S. Gillmeier, A.K.R. Jayakumari, E.W.M. Roosenboom, J. Muralha, G. Belez Vaz, L.F. Sánchez Castro	Room Z003
	Investigation of a Long Term Dispersion Process in an Urban Environment – A Wind Tunnel Study T. Tolidis, B. Leitl, F. Harms	Room Z003
	Emergency Planning in Nuclear Power: A Re-emerging Issue K. Jurčáková, A. Kecek, H. Hušáková, J. Crha	Room Z003

04:30 p.m. Coffee Break

04:45 p.m.	Future of PHYSMOD- Discussion	Room Z003
05:45 p.m.	Closing Remarks	Room Z003

CONFERENCE VENUE – Leibniz Institute for Agriculture Engineering and Bioeconomy (ATB)



INFORMATION

ADDRESSES

Workshop venue

August 25-27 **Leibniz Institute for Agriculture Engineering and Bioeconomy (ATB)**
Max-Eyth-Allee 100, 14469 Potsdam, Germany

Evening event

August 26 **Wiener Café Potsdam**
Luisenplatz 4, 14471 Potsdam

PROGRAM UPDATES

The organizers reserve the right for **program changes**.

ORGANIZATION

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PUBLIC TRANSPORT

Travel service of German Railways: <https://reiseauskunft.bahn.de/bin/query.exe/en>
Transport in Potsdam: <https://www.vbb.de/en/fahrinfo>

FURTHER INFORMATION

Please visit our conference website <https://physmod.atb-potsdam.de/en/start>