

Franco-German Interdisciplinary Workshop on Pedestrian Dynamics and Urban Mobility



📍 25-28 June 2024, Wuppertal (Germany)

🔗 Registration & program: pedum24.sciencesconf.org

🏠 Context

The aim of this workshop is to provide a **multidisciplinary forum** for discussion and exchange, bringing together young researchers and experts from **computer science, physics, mathematics, data science, engineering, sociology, and psychology** on topics related to the modelling of **pedestrian dynamics** and **urban mobility**. **Young researchers** at the doctoral or post-doctoral level, as well as students at the end of their Masters, will be particularly welcome.

The workshop is supported by the **Franco-German University**. **The registration is free!**

🧩 Research topics

The topics are categorised into three main research axes covering a wide range of approaches to modelling **pedestrian, bicycle, and vehicle** behaviours and their dynamics.

- Topic 1 Physics- and optimisation-based models**
Bio-physics models, motion cost functions, multi-criteria optimisation
- Topic 2 Socio-psychological factors**
Pairwise vs holistic interaction, situation and behaviour identification
- Topic 3 Data-driven algorithms**
Deep learning, cost and evaluation metrics

Cross-disciplinary transversal topics **Hybrid modelling** (physics/optimisation, physics/socio-psychology, physics/data-driven); **Mixed urban traffic; Multi-agent systems**