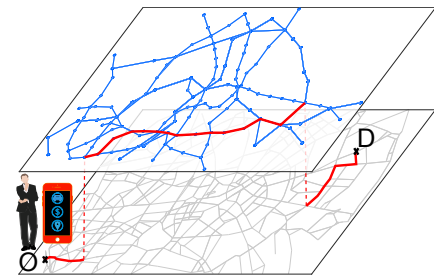


PhD Positions in Future Mobility Systems

We are looking for two outstanding PhD candidates with a solid background in mathematics/computer science (or similar), interested in the use of game theory/optimization to model, analyze and operate intermodal autonomous mobility-on-demand systems.

About the project

The students will be part of the research project *DInAMO - Data-driven Intermodal Autonomous Mobility: Operations and strategic control*. The project aims at developing a methodological framework for the coordination of large-scale intermodal mobility systems at the operational and strategic level, combining recent advances in learning theory and big data with classical approaches in optimal control, operations research, and game theory.



Fully funded joint-appointments at ICL and TUM

The positions are *fully funded* through the Joint Academy of Doctoral students (JADS), a network of scientific excellence between Imperial College London (ICL) and the Technical University of Munich (TUM), and offer an excellent opportunity to pursue cutting-edge research in a collaborative environment within two world-renowned universities. More info on JADS: [JADS-ICL](#) and [JADS-TUM](#).

Figure 1: Berlin's Intermodal Mobility on Demand network (public transport in blue, road network in grey), with a customer traveling from origin (O) to destination (D). Her request is served with a combination of robot-taxis for the first/last mile (grey network), and public transport (blue network)

The two PhD positions are *joint* between Imperial College London and the Technical University of Munich: The Computational Optimization Group will host one PhD student at ICL, and the Professorship of Operations and Supply Chain Management will host one PhD student at TUM. Each student will spend a minimum of one year at the partner institution. Both PhD students will be co-advised by [Dario Paccagnan](#) (ICL) and [Maximilian Schiffer](#) (TUM), with significant emphasis on close collaboration between the institutions. The positions are based in central London (South Kensington) and central Munich (main campus).

Eligibility & How to apply

To be eligible, you ideally have experience in one or more of the following or related domains

- * Game theory or Algorithmic game theory
- * Machine Learning, especially Structured Learning
- * Convex Optimization or Combinatorial Optimization
- * Control theory
- * Online algorithms or Approximation algorithms

You can apply or reach out informally via e-mail writing to applications@osm.wi.tum.de. Please include your CV, transcript of records, and two academic references.

Imperial College London is committed to equality and valuing diversity. We are also an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Two Ticks Employer, and are working in partnership with GIRES to promote respect for trans people. TUM strives to raise the proportion of women in its workforce and explicitly encourages applications from qualified women. Applications from disabled persons with essentially the same qualifications will be given preference.