

Quantum Computing and Mobility (QCMobility)

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Mobility is currently undergoing major changes: new technologies and intelligent transport systems are creating challenges in short time that are not entirely foreseeable. In addition, climate change requires energy efficiency, for instance, in the control of routes and traffic flows, in demand-orientated transport or in the logistics sector.

In this poster we provide an overview of the project QCMobility, which explores how these topics might be attacked with the help of quantum computers in the future. The problems selected in QCMobility are issues that are already highly relevant today and will become even more important in the future due to more flexible or highly automated transport systems. Here, quantum computing could provide novel concepts for solving multidimensional optimisation problems. The use of these methods must be trialled in the near future in order to support a transformation in the field of mobility.