

Michael Zwerger
Universität Basel

Measurement-based Quantum Computation

Measurement-based quantum computation is a scheme of quantum computing where the computation is driven by single qubit measurements on entangled resource states.

The first part of the talk will cover the basic principles of measurement-based quantum computation and an overview over experimental demonstrations. In the second part some recent results from the quantum information group in Innsbruck will be discussed. This includes measurement-based quantum communication, adaptive quantum computation and flexible resources for quantum metrology.