

14. April 2023

Einladung zum Physikalischen Kolloquium

05.05.2023 **Karl Jansen, DESY Zeuthen**
»Quantum Computing: A future perspective for scientific computing«
Einführung: M. Mühlleitner

Quantum computing is rapidly emerging as a new method of scientific computing. It has the potential to solve problems much faster than it is possible with classical computers. Examples are applications in experimental and theoretical high energy physics, but also beyond.

In particular, with quantum computers problems can be tackled that are very hard or even impossible to address with classical computers. After providing a short status of lattice gauge theories and tensor network methods, we give an introduction to quantum computing. We then discuss several real world examples of applications which can already now be computed on existing quantum computers.

Der Vortrag findet **am Freitag, den 05. Mai 2023 um 15:45 Uhr im Otto-Lehmann-Hörsaal**, Physik-Flachbau (Geb. 30.22), KIT-Campus Süd statt.