

# Quantum Computation for Nuclear Physics and beyond (Block 7)

*Tuesday, 6 July 2021 12:00 (1h 15m)*

**Abstract:**

I will give an introduction into the exciting field of quantum computation and quantum simulation from the perspective of a nuclear theorist.

My goal is to convince you that this potentially is the very beginning of a new era, where theorists may be able to compute things that had been impossible before.

I will highlight the many connections between high energy and nuclear, condensed matter and atomic, molecular and optical physics that are inspired by advances

in controlling matter at the single quantum level. These connections force us to think about old (and new) problems in very different and exciting ways.

**Presenter:** MUELLER, Niklas (University of Maryland)