Novel approaches to scaling trapped-ion quantum computing APERO

after the colloquium



Prof. Jonathan Home ETHZ Monday February 5th 15:00 Room CE 2

Trapped-ions are among the most successful approaches to realizing quantum computers, however it remains a major challenge to scale towards these systems up interconnected arrays of hundreds of ions. I will describe how we are these approaching challenges using ion traps with integrated photonics, as well as moving from radio-frequency trapping to microfabricated Penning traps, which looks favourable the from perspective of realizing flexibly reconfigurable 2-dimensional arrays.

or on zoom : https://epfl.zoom.us/j/64905394203