Contribution ID: **85** Type: **not specified**

Ion traps and the road to fault tolerant quantum computing

Thursday 3 November 2022 10:15 (20 minutes)

Trapped ions are one of the leading and furthest developed technologies in quantum computing. However, despite higher quality operations than on any other platform and the absence of variations in qubit quality, the road to fault-tolerant quantum computing remains long and steep. In this talk, I will briefly review the state of the art of the trapped-ion platform, illustrate the current attempts to scaling up to larger numbers of qubits and highlight the challenges faced in control electronics and reliable manufacturing.

Presenter: HEMPEL, Cornelius (Paul Scherrer Institut / ETH Zurich)

Session Classification: Industry & Entrepreneurship