

Practical Quantum Computing with Trapped Ions



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APER0
after the
colloquium

Monday
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14:15
Room CE1 2

The hyperfine qubits in trapped atomic ions represent an ideal physical platform to store and manipulate qubits. I will discuss the basic operational principle of this system, and recent technological developments that enabled construction of reliable quantum computing system based on this platform. Utilizing these systems, I will share some examples of quantum algorithms and applications development that could lead to practical applications of quantum computers in the near term. I will conclude by discussing future prospect of reaching quantum advantage on computational or simulation tasks using trapped ion systems.

or on zoom :

<https://epfl.zoom.us/j/64905394203>

Host: Prof. Vladimir Manucharyan