

PICC

Thu, 2010-02-25 13:15 - [Daniele Binosi](#) [1] **Full Name:** The Physics of Ion Coulomb Crystals
Coordinator: Giovanna Morigi

Location

Saarland University 66123 Saarbrücken Germany
49° 14' 56.1228" N, 7° 1' 3.2124" E
See map: [Google Maps](#) [2]

Website:

<http://qphys.uni-saarland.de/index.php/picc> [3]

Running time: 2010-06-01 - 2013-05-31

PICC aims to identify tools for controlling ion crystal as their size is scaled up, develop strategies for implementing quantum dynamics of mesoscopic ion Coulomb crystals in a noisy environment and explore the capability of ion Coulomb crystals as quantum simulators. The targeted breakthrough is a ten fold increase in the number of entangled ions available for quantum operation operations. The long-term vision underlying this proposal is to engineer quantum correlations and entanglement in ion Coulomb crystals in order to exploit them for technological purposes of different kinds.

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- [Quantum Information Theory](#) [6]
- [STREP](#) [7]
- [Quantum Metrology, Sensing and Imaging](#) [8]

Source URL: <http://qurope.eu/db/projects/picc>

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