

13 FEBRUARY 2026, AT 11.00 AM

ECT\* - VILLA TAMBOSI, VILLAZZANO

## MAGNETO-FEEDBACK COOLING OF A MAGNETO-LEVITATED MICROPARTICLE

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I theoretically study the dynamics of fluctuations in the presence of feedback in a magneto-levitated system formed by a spherical micromagnet suspended in a superconducting trap. I characterized the feedback cooling method to describe experimental results obtained here in Trento. I will present some results demonstrating that the system can be cooled to temperatures on the order of millikelvins, followed by a discussion on enhancing these cooling techniques through a Machine Learning approach.

Please, facilitate the organization of the seminar and coffee break by registering via the QR code. Thank you.



ECT\* Director: Prof. Ubirajara van Kolck

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