

"Who Ordered That?"

The Dance of the Muon

Who Ordered That? I.I. Rabi asked this question when a new particle, the muon, was discovered in 1936. Ever since, this unexpected particle has constantly brought us more surprises, leading to the discoveries of the pion, parity violation, charm and bottom quarks, neutrinos and flavor physics, the precision measurement of its magnetic dipole moment ($g-2$), as well as applications in material science and muon tomography, opening an avenue in front of us to new physics and new technology

After a historical overview and appreciation of physics associated with the muon, I will discuss a new aspect — a high energy muon collider. Due to the recent technological breakthroughs for muon cooling, the muon collider program has regained its momentum in the U.S., Europe and Japan. I will present the idea and the current status for a muon collider and discuss the rich physics potential in exploring the physics beyond the Standard Model with a multi-TeV muon collider at the energy frontier.



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Registration: <https://agenda.irmp.ucl.ac.be/event/5492/> (free of charge)