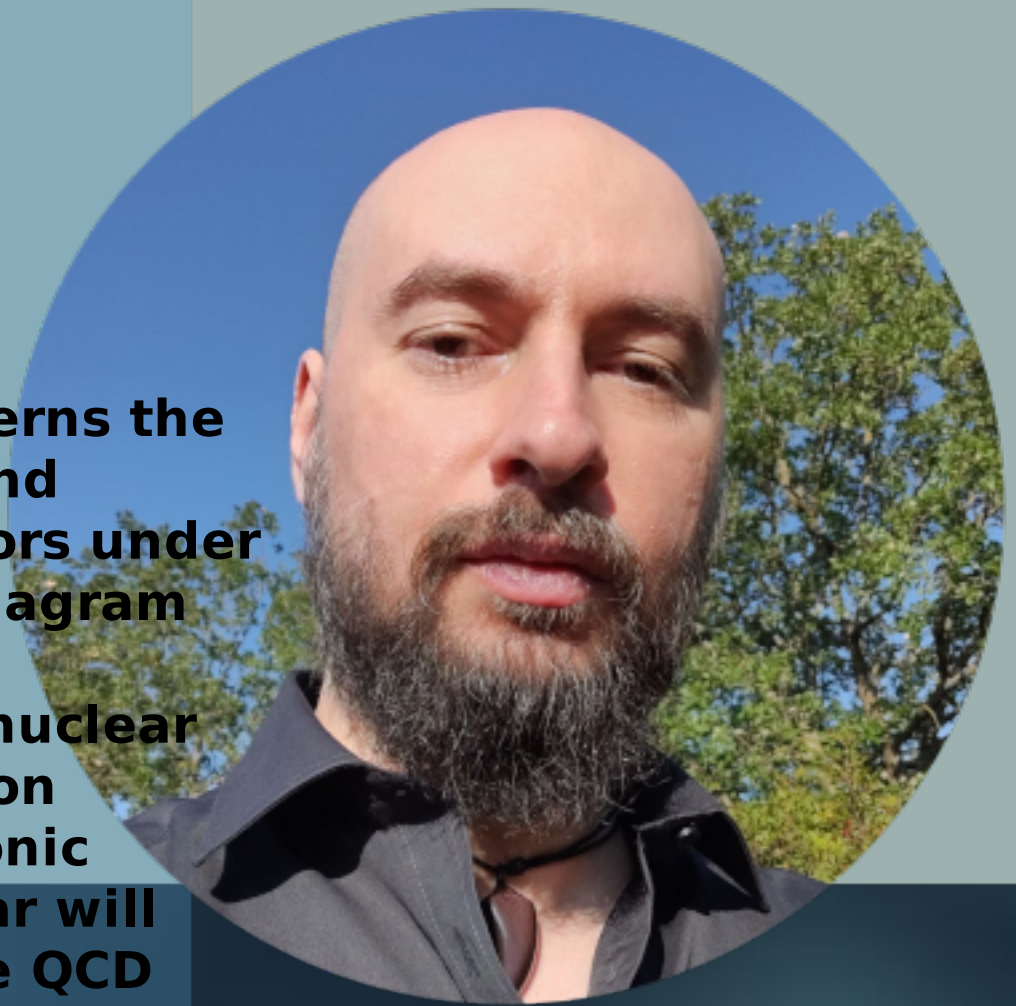


**Sala Conferenze, DFA
03/12/2024 h 14:45**

Quantum Chromodynamics (QCD) governs the strong interactions between quarks and gluons, giving rise to complex behaviors under extreme conditions. The QCD phase diagram provides a theoretical framework for understanding the various phases of nuclear and quark matter, from the quark-gluon plasma at high temperatures to hadronic matter at lower densities. This seminar will focus on the theoretical aspects of the QCD phase diagram, highlighting critical points, phase transitions, and recent progress in lattice QCD calculations. We will explore how these insights contribute to our understanding of the fundamental structure of matter in the universe.



I Science Colloquia del DFA "Ettore Majorana", sono appuntamenti con la scienza dedicati a Ricercatrici e Ricercatori, Studentesse e Studenti (della Laurea Magistrale in Physics, del terzo anno della Laurea Triennale in Fisica, e dei Dottorati al DFA) interessati a condividere argomenti ed esperienze di ricerca. I Science Colloquia, coordinati dai Proff. Giuseppe Falci e Livio Lamia, si tengono con cadenza mensile.

The QCD phase diagram: Insights into strong interactions

**Marco Ruggieri
DFA UniCT**

