University of Crete
Department of Physics

Physics Colloquium

Thursday, 19 November 2026 | 17:00 – 18:00, Seminar Room 3rd Floor & Zoom

The Yang-Mills Millennium Prize Problem

Prof. Michael Douglas

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ABSTRACT

Yang-Mills theory (QCD) predicts that quarks are confined into hadrons. This is well established physically, but proving it mathematically is one of the open Millennium Prize problems of the Clay Mathematics Institute. We give an overview of the problem, its history and status.

Addendum: Prof. M. Douglas is a world expert in Quantum Field Theory and the use of AI in Mathematics and Physics. He serves on the panel responsible for the AI repository containing work on the Yang Mills, Clay Institute Millennium problem.

The Zoom link will be sent with the email announcement.