Institute for Research in Fundamental Sciences
SCHOOL OF MATHEMATICS

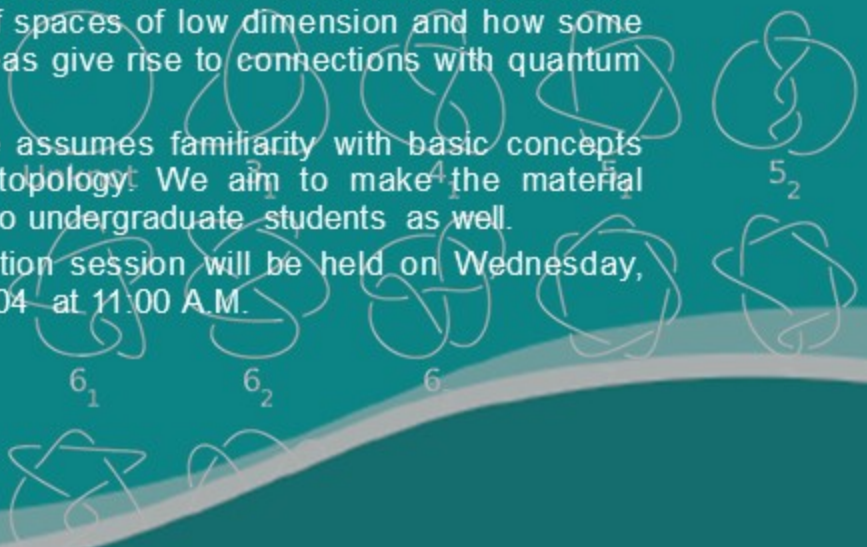
TOPOLOGY & PHYSICS IN LOW-DIMENSIONS

A One-Year Focused Program

Throughout this program, we will explore the fundamental structures and invariants that arise in the study of spaces of low dimension and how some of these ideas give rise to connections with quantum physics.

This course assumes familiarity with basic concepts in general topology. We aim to make the material accessible to undergraduate students as well.

The orientation session will be held on Wednesday, 16 Mehr 1404 at 11:00 A.M.



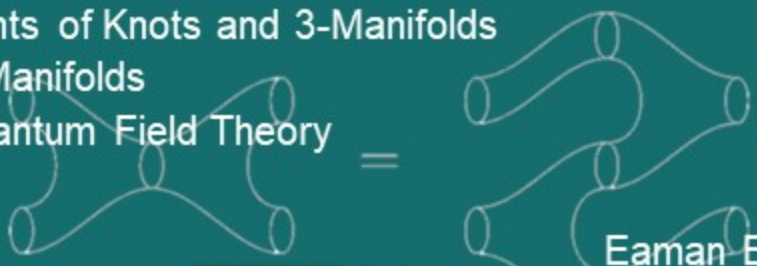
COURSES

FIRST SEMESTER:

Algebraic & Differential Topology
Morse Theory

SECOND SEMESTER:

Modern Invariants of Knots and 3-Manifolds
Topology of 3-Manifolds
Topological Quantum Field Theory



INSTRUCTORS

Eaman Eftekhary
Ali Kamalinejad
Hamed Pakatchi
Narges Bagherifard