

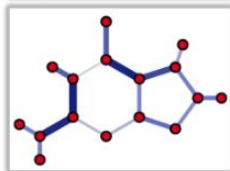
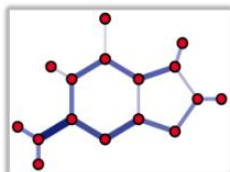
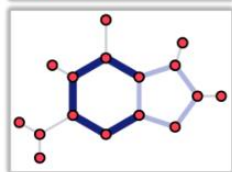
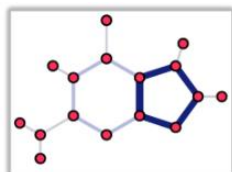
THE DEPARTMENT OF MATHEMATICAL SCIENCES PROUDLY PRESENTS

COLLOQUIUM

Fall 2022

Enriched Hodge Structures

Dr. Deepam Patel
Purdue University



Nov-22-2022
10:30 am



Abstract

The Hodge conjecture is one of the central problems in Algebraic Geometry. The first part of this talk will serve as a general introduction to the Hodge conjecture. The conjecture says roughly that certain cohomology classes are 'algebraic' in the setting of smooth projective varieties. In the second part, I'll discuss some recent joint work with M. Nori and V. Srinivas on an enrichment of Hodge structures which would allow one to understand analogs of the Hodge conjecture in the singular or non-projective cases. I will try to make the talk as self-contained as possible, and in particular, will not assume a background in algebraic geometry.

Anfiteatro Física B

Refrigerios, 15 minutos antes.

