

An Introduction to Khovanov Homology

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Khovanov homology is a very powerful link invariant introduced by Mikhail Khovanov at the end of the past century and later interpreted by Oleg Viro in terms of enhanced states of diagrams. It is a bigraded homology whose Euler characteristic is the Jones polynomial of a link. The goal of this course is to give an introduction to different approaches to Khovanov homology by several authors and present the lecturer's own work redefining its extreme part.

Lectures

1. Original definition of Khovanov homology following Bar-Natan (July 5)
2. Khovanov homology in terms of enhanced states following Viro:
A combinatorial approach (July 6)
3. A new approach to extreme Khovanov homology via Lando graphs (July 7)

Place: IMUB Lecture Room**Time:** 11:30 – 13:00www.imub.ub.edu