

***PROFINITE RIGIDITY OF THE MULTIVARIABLE
ALEXANDER POLYNOMIALS OF LINKS***

Fudan Topology Seminar

Speaker: Biao Ma

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Time: Fri, Apr. 12th, 16:00 - 17:00

Venue: Room 102, SCMS

Abstract: The profinite completion of a group encodes the set of all finite quotients of the group. An interesting question in low dimensional topology is what kind of properties of a 3-manifold can be determined by the profinite completion of its fundamental group. In 2018, Ueki showed that for a knot in S^3 , the Alexander polynomial of the knot is determined by the profinite completion of its knot group. For a link in S^3 , one would like to know if the multivariable Alexander polynomial is also determined by its link group. In this talk, I will explain why this question is complicated and report some results on what we know. This talk is based on an ongoing joint work with Jun Ueki.