Speaker:Mijatovic, AleksandarTitle:Bounds on Pachner moves for non-fibred Haken 3-manifoldsAuthors:Aleksandar MijatovicAffiliations:University of Cambridge

Abstract: It has been known for some time that any triangulation of a given 3-manifold M can be transformed into any other triangulation of M by a finite sequence of Pachner moves. It is also known that the existence of a computable upper bound on the length of this sequence is equivalent to an algorithmic solution of the recognition problem for M among all 3-manifolds.

In this talk I will outline a string of results that lead to an explicit upper bound on the number of Pachner moves required to connect any two triangulations of M. The bound is in terms of the number of 3-simplices contained in the triangulations. The assumption on M is that it is Haken and that none of the simple pieces of its JSJ-decomposition are homeomorphic to surface bundles or surface semi-bundles.