Speaker: **Bao, Zhiqiang**
Title: *The compressibility of checkerboard surfaces of link diagrams*
Authors: Zhiqiang Bao
Affiliations: Peking University, P. R. China

Abstract: Consider the checkerboard surfaces defined by some link diagrams. When they are not orientable, one considers the boundary surfaces of their small regular neighborhoods. The compressibility problem of these kinds of surfaces in the link complements is studied. We defined normal positions for the compressing discs. This brings up an algorithm to verify compressibility directly from the link diagrams. As an application, the algorithm is applied to diagrams in the knot tables. Examples of both (infinitely many) examples of incompressible and (surprisingly) completely compressible checkerboard surfaces of non-alternating knot diagrams are discovered. The change of compressibility under Reidermeister moves is also studied.