Speaker: **Lei, Fengchun**
Title: *General complete curve systems in boundary of 3-manifolds*
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Abstract: It is a well known theorem that a 3-manifold M with a Heegaard diagram $(V; J_1, \cdots, J_n)$ is a homotopy 3-sphere if and only if there exists an embedding of V in S^3 so that $J_1, \cdots, J_n$ bound n pairwise disjoint surfaces $S_1, \cdots, S_n$ in $W = \overline{S^3 - V}$. We may assume $S_1, \cdots, S_n$ are incompressible in W. But in general, we cannot assume that they are boundary incompressible, since boundary compressions may yield surfaces with more than one boundary component. We describe a version of above theorem in which the involved surfaces are incompressible and boundary incompressible in the corresponding manifold.