1025-57-180Yongwu Rong* (rong@gwu.edu), Department of Mathematics, George Washington University,
Washington, DC 20052. A homology theory via clock moves. Preliminary report.

This talk is motivated by an attempt to reconstruct the combinatorial Heegaard Floer theory without grid diagrams, following a recent paper by Manolescu, Ozsvath, and Sarkar. For each link diagram, we construct graded homology groups using Kauffman's state sum and clock moves for the Alexander polynomial. We also demonstrate an "elegant" but unfortunately flawed "proof" for its topological invariance. Nevertheless, we have a homology theory for link diagrams which yields the Alexander polynomial when taking Euler characteristic. (Received January 22, 2007)