## 1117-57-309 Yewon Joung\* (yjoung@math.msu.edu), Seiichi Kamada (skamada@sci.osaka-cu.ac.jp) and Sang Youl Lee (sangyoul@pusan.ac.kr). Applying Lipson's state models to marked graph diagrams of surface-links.

A surface-link of n components is n mutually disjoint connected and closed (possibly orientable or non-orientable) 2manifolds smoothly (or piecewise linearly and locally flatly) embedded in the oriented 4-space. In 1992, A. S. Lipson constructed two state models yielding the same classical link invariant obtained from the Kauffman polynomial F(a;z). In this talk, we apply Lipson's state models to marked graph diagrams of surface-links, and observe when they induce surface-link invariants. This is a joint work with Seiichi Kamada and Sang Youl Lee. (Received January 16, 2016)