

Meeting: 1006, Lubbock, Texas, SS 8A, Special Session on Invariants of Links and 3-Manifolds

1006-51-146 **Fumikazu Nagasato*** (fukky@math.kyushu-u.ac.jp), 1396 Clemson Way, Riverside, CA 92507.

Notes on the Kauffman bracket skein module of handlebodies.

As shown by D. Bullock, the Kauffman bracket skein module (KBSM, for short) of a compact oriented 3-manifold can be thought of as a deformation of the $SL(2, \mathbb{C})$ -character variety of the fundamental group of the 3-manifold. In this talk, we will show a direct relationship between the KBSM and the Lie algebra $su(2)$ in the case of handlebodies. We will also discuss some possible applications of this relationship. (Received February 15, 2005)