1137-57-133 **Rhea Palak Bakshi*** (`rhea_palak@gwu.edu`), **Józef H. Przytycki** (`pryzytyck@gwu.edu`), **Marithania Silvero** (`marithania@us.es`) and **Xiao Wang** (`wangxiao@gwu.edu`). *Multiplying links in the thickened sphere with four holes.* Preliminary report.

In 1987, Józef H. Przytycki introduced Skein Modules as a way to extend the knot polynomials of the 1980's to knots and links in arbitrary 3-manifolds. Since their introduction, Skein Modules have become central in the theory of 3-manifolds.

In 1997, Frohman and Gelca gave a nice product-to-sum formula for the Kauffman Bracket Skein Algebra (KBSA) of $T^2 \times [0, 1]$. We try to discover a similar formula for the multiplication of links in the KBSA of $F_{0,4} \times [0, 1]$, the thickened sphere with four holes. We will present partial results for this case. (Received January 31, 2018)