1151-57-68 **Jozef H. Przytycki*** (przytyck@gwu.edu), **Petr Vojtechovsky** and **Seung Yeop Yang**.

Homology of Yang-Baxter operator yielded by Alexander numbering.

Alexander numbering leads to the set theoretic Yang-Baxter operator $R : X \times X \to X \times X$ given by $R(a, b) = (b-1, a+1)$ where $X = Z$ or Z_m. We compute, partially, homology of the operator R. In particular, we show that for $X = Z_2$ the normalized homology $H_n^N(R) = Z \oplus Z_2$ for odd n, and Z for even n. Notice that in this case homology coincides with Hochschild homology of the group Z_2. (Received August 08, 2019)