1128-57-331 **Krzysztof K. Putyra** and **Alexander N. Shumakovitch*** (shurik@gwu.edu), 801 22nd St., NW, Phillips Hall, Suite 739, Department of Mathematics, The George Washington University, Washington, DC 20052. *On unified Khovanov homology and its computations.* Preliminary report.

It was shown by Putyra that even and odd Khovanov homology can be combined into a unified Khovanov homology theory. Unified Khovanov homology groups have the structure of modules over the group ring $\mathbb{Z}\mathbb{Z}_2$ with a convenient pullback presentation. We start by showing that these modules are always separated. As such, they admit algorithmic classification as a direct product of indecomposable $\mathbb{Z}\mathbb{Z}_2$-modules which, in turn, were classified by Levy. This allows one to compare unified Khovanov homology for different knots and links. We present evidence that the unified Khovanov homology is a stronger knot invariant than the even and odd Khovanov homology combined. (Received February 28, 2017)