1145-57-2203   **Radmila Sazdanovic*** (`rsazdan@ncsu.edu`), Department of Mathematics NC State Univeristy, PO box 8205, Raleigh, NC 27695, and **Vladimir Baranovsky**. *On factorization and chromatic graph homology.* Preliminary report.

Factorization homology, introduced by Ayala, Francis, and Tanaka, generalizes Hochschild homology. Helme-Guizon and Rong's chromatic homology, a Khovanov-type homology for graphs, approximates Hochschild homology when applied to cycle graphs. We provide alternative construction for the chromatic homology, similar to factorization homology. The main difference between the two constructions stems from using derived versus underived products. Therefore the chromatic homology of any graph can be thought of as an approximation of factorization homology. (Received September 25, 2018)