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Abhijit Champanerkar* (achampanerkar@jaguar1.usouthal.edu), Department of Mathematics and Statistics, ILB 325, University of South Alabama, Mobile, AL 36688, and **Ilya Kofman** (ikofman@math.csi.cuny.edu), Department of Mathematics, College of Staten Island, Staten Island, NY 10314. *A note on mutation and Khovanov homology.*

It is conjectured that the Khovanov homology of a knot is invariant under mutation. In this paper we reformulate this conjecture using a matroid obtained from the Tait graph (checkerboard graph) G of a knot diagram K . The spanning trees of G provide a filtration and a spectral sequence that converges to the reduced Khovanov homology of K . We show that the E_2 -term of this spectral sequence is a matroid invariant and hence invariant under mutation. (Received February 01, 2008)