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**Radmila Sazdanovic\*** (radmila@gwu.edu), The George Washington University, Mathematics Department, 2115 G street NW, Washington, DC 20052, and **Milena Pabiniak** and **Jozef H. Przytycki**. *Torsion in Chromatic Graph Cohomology*.

Motivated by the interpretation of Hochschild homology as graph cohomology of polygons, we explore torsion in chromatic graph cohomology. For algebra  $A_3$  we give the concrete formula for  $H_{A_3}^{1,2|G|-3}(G)$  of arbitrary graph  $G$ , showing that it can contain arbitrary torsion. In the case of algebra  $A_2$  we compute  $\text{tor}H^{1,v-1}(G)$  and we go deeper into  $H^{2,v-2}$  exploring the role of even cycles in chromatic graph cohomology and connections to Khovanov homology. (Received August 20, 2007)