1151-05-292   **Nathan Bowler**, **Daryl Funk*** (`funkd@douglascollege.ca`) and **Daniel Slilaty**. *Matroids from biased graphs: frame, lift, quasi-graphic, and a common generalisation.*

Biased graphs were introduced by Zaslavsky in 1989 as representations for members of two important classes of matroids: frame matroids and single-element lifts of graphic matroids. These have come to play an important role in matroid structure theory. Recently, biased graphs have been used as representations for the new class of "quasi-graphic" matroids. Attempting to answer a question of Zaslavsky (1991), we introduce yet another class of matroids defined via biased graphs, the class of *biased-graphic matroids*. This class is a common generalisation of each of the classes of frame, lift, and quasi-graphic matroids. Each biased-graphic matroid admits a description using a refinement of the partition of the set of cycles of a biased graph, and given a biased graph each such refinement satisfying a natural condition yields a representation of a biased-graphic matroid. (Received August 20, 2019)