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James Oxley and **Simon Pfeil***, spfeil2@math.lsu.edu, and **Charles Semple** and **Geoff Whittle**. *Matroids with many small circuits and many small cocircuits*. Preliminary report.

A consequence of Tutte's Wheels-and-Whirls Theorem is that the only 3-connected matroids in which every element is in both a 3-element circuit and a 3-element cocircuit are the well-known wheels and whirls. Miller showed that a sufficiently large 3-connected matroid in which every pair of elements is contained in a 4-element circuit and a 4-element cocircuit must belong to another well-known family, namely spikes. This follow-up to last year's talk presents the full solution to several variants of these two results. (Received September 21, 2015)