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**Caleb Davis**, **Jeffrey Hirst** and **Jake Pardo\*** (pardojj@appstate.edu), 339 Walker Hall, 121 Bodenheimer Drive, Boone, NC 28607, and **Tim Ransom**. *Reverse Mathematics of Hypergraph Colorings*. Preliminary report.

Reverse mathematics essentially seeks to break results from all areas of mathematics down into their most basic axioms. Graph theory has proven to be a topic replete with fascinating reverse mathematical results, and so it only makes sense to ask similar questions about what happens when we extend our scope to include hypergraphs. I will discuss a bit of what is currently known about the reverse mathematics of hypergraph colorings as well as explain some recent joint work with Davis, Hirst, and Ransom. (Received September 25, 2017)