Neal Owen Bushaw* (neal@asu.edu), Andrzej Czygrinow and Jangwon Yie. Minimum codegree conditions for tiling by tight cycles. Preliminary report.

We discuss recent work on tilings in 3-uniform hypergraphs. Let C be any tight cycle on 3k vertices. We show that for n sufficiently large and divisible by 3k, every order n hypergraph with minimum co-degree at least $\frac{n}{2}$ contains a perfect C-tiling. A major tool in our proof is the absorption method, introduced by Rödl, Rucińksi, and Szemerédi. This is joint work with Andrzej Czygrinow and Jangwon Yie. (Received February 22, 2016)