## 1070-57-242 Genevieve S. Walsh\* (genevieve.walsh@gmail.com). Some cubed hyperbolic 2- and 3manifolds.

Given a Coxeter group with defining graph a triangulation of an (n-1)-sphere, we produce an n-manifold with an underlying cubed structure, which naturally sits in a higher-dimensional Euclidean space. We explore the ramifications when n is 2 or 3. Here, given simple conditions on the defining graph, the manifold is hyperbolic. This is joint work with Sam Kim. (Received February 14, 2011)