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Michael Landry* (mlandry@wustl.edu). *Veering triangulations and Thurston's norm.*

Thurston's norm on the second real homology of a hyperbolic three-manifold M enjoys broad interest in low-dimensional topology. The norm measures a type of complexity for homology classes, and its unit ball is a rational polyhedron. Work of Thurston, Fried, Mosher, McMullen, and others has shown that the combinatorics of this polyhedron are related in beautiful ways to the topology of M and to certain dynamical systems living in M . However, the understanding of this picture is mostly concentrated around fibrations of M over the circle and there is still much to discover. Veering triangulations, defined in 2010 by Agol, form a class of ideal triangulations of cusped hyperbolic three-manifolds. We show that we can use a veering triangulation to capture the data of a particular face of the norm ball after Dehn filling. We also show that the triangulation detects more refined information: the result can be summarized as “a veering triangulation sees a face at the level of isotopy, not just homology.” (Received August 07, 2020)