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Recent work by Dimofte, Gaiotto and Gukov defines the "index" (a collection of Laurent series) associated to an ideal triangulation of an oriented cusped hyperbolic 3-manifold. "Physics tells us" that this index should be a topological invariant of the manifold, not just of the triangulation of it. The problem is that the index is not well defined on all triangulations. We define a class of triangulations of a 3-manifold, depending only on the topology of the manifold, such that the index is well-defined and has the same value for each triangulation in the class. A key requirement is that the class of triangulations be connected by local moves on the triangulations, since we can prove invariance of the index under these moves. To achieve this requirement we import a result from the theory of regular triangulations of Euclidean point configurations due to Gelfand, Kapranov and Zelevinsky. (Received August 03, 2013)