1077-57-588   **Craig D. Hodgson** (`craigdh@unimelb.edu.au`), Department of Mathematics and Statistics, University of Melbourne, Parkville, VIC 3010, Australia, **J. Hyam Rubinstein** (`rubin@ms.unimelb.edu.au`), Department of Mathematics and Statistics, University of Melbourne, Parkville, VIC 3010, Australia, and **Henry Segerman*** (`segerman@unimelb.edu.au`), Department of Mathematics and Statistics, University of Melbourne, Parkville, VIC 3010, Australia. *Triangulations of hyperbolic 3-manifolds admitting strict angle structures.*

It is conjectured that every hyperbolic 3-manifold with torus boundary components has a decomposition into positive volume ideal hyperbolic tetrahedra (a "geometric" triangulation of the manifold). Under a mild homology assumption on the manifold we construct topological ideal triangulations which admit a strict angle structure, which is a necessary condition for the triangulation to be geometric. In particular, every knot or link complement in the 3-sphere has such a triangulation. (Received September 07, 2011)