1108-57-388 **David Futer*** (dfuter@temple.edu), Mathematics Department, Temple University, 1805 North Broad St., Philadelphia, PA 19122, and **Christian Millichap** (christian.millichap@gmail.com), Mathematics Department, Temple University, 1805 North Broad St., Philadelphia, PA 19122. *Geometrically similar knots.* Preliminary report.

There are several known ways to produce hyperbolic 3-manifolds that isospectral (i.e. have the same spectrum of geodesic lengths) but not isometric. All known constructions of of this sort involve tricks with finite covers, leading Reid to ask whether this is a necessary feature. That is, are isospectral manifolds necessarily commensurable? I will describe a way to build pairs of knot complements that are incommensurable but have the same closed geodesics up to length L, where L is as large as one likes. This is joint work with Christian Millichap. (Received January 19, 2015)