

1053-51-104

M. Davis, T. Januszkiewicz and J.-F. Lafont* (jlafont@math.ohio-state.edu).

Obstruction to Riemannian smoothing of CAT(-1) manifolds.

I will give some new examples of smooth manifolds supporting locally CAT(-1) metrics, but which do not support any Riemannian metric of non-positive curvature. The examples arise from Davis complexes associated to certain right-angled Coxeter groups G , where the groups G are obtained from suitable triangulations of the 3-sphere. This is joint work with M. Davis and T. Januszkiewicz. (Received August 25, 2009)