Howard Masur* (masur@math.uic.edu), Department of Mathematics, University of Illinois at Chicago, 851 S. Morgan, Chicago, IL 60607, and Saul Schleimer. Hyperbolicity in the arc and disk complex. Preliminary report.

There are several complexes that naturally occur in low dimensional topology. Among these are the arc complex of a surface with boundary, and the disk complex associated to a handlebody. Each of these has a natural embedding in the curve complex of the surface. The embeddings turn out not to be a quasi-isometric. We will discuss this phenomenon and the following theorem Theorem: The arc complex and disk complex are Gromov hyperbolic spaces. (Received September 01, 2006)