THE VOLUME SPECTRUM OF HYPERBOLIC 4-MANIFOLDS

JOHN G. RATCLIFFE AND STEVEN T. TSCHANTZ

Abstract. We construct complete, open, hyperbolic 4-manifolds of smallest volume by gluing together the sides of a regular ideal 24-cell in hyperbolic 4-space. We also show that the volume spectrum of hyperbolic 4-manifolds is the set of all positive integral multiples of $4\pi^2/3$.