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Hyperbolic cone metrics on 3-manifolds with boundary.

We prove that a hyperbolic cone metric on an ideally triangulated compact 3-manifold with boundary consisting of surfaces of negative Euler characteristic is determined by its combinatorial curvature. The proof uses a convex extension of the Legendre transformation of the volume function. Several related results on maximum volume semi-angle structures are obtained. (Received August 19, 2013)