Hossein Namazi* (hossein@math.princeton.edu), Princeton University, Mathematics Dept., Fine Hall, Washington RD, Princeton, NJ 08544. From handlebodies to closed 3-manifolds: a geometric approach.

We consider hyperbolic structures on handlebodies and we try to describe the geometry under certain assumptions. Then we use this description to construct hyperbolic structures on closed 3-manifolds. As a result we have a new way of constructing and describing the hyperbolic metric and in addition the description of the hyperbolic metric allows us to answer many topological questions about these manifolds. (Received September 23, 2006)