

TREVOR JONES, University of New Brunswick
Computing some nonstandard Betti numbers

In previous work, we established an abstract generalized Gauss-Bonnet theorem for surfaces. We discuss the computation of our nonstandard Betti numbers in the theorem, at least for the special case of Riemann surfaces of constant curvature. By the uniformization theorem we may as well consider hyperbolic space modulo a discrete subgroup of isometries and we discuss the case of hyperbolic space in detail.