Meeting: 1003, Atlanta, Georgia, SS 33A, AMS Special Session on Topics in Geometric Function Theory, I

1003-30-215 William Ma* (wma@pct.edu), School of Integrated Studies, One College Avenue, Pennsylvania College of Technology, Williamsport, PA 17701, and David Minda (David.Minda@math.uc.edu), Department of Mathematical Sciences, University of Cincinnati, Cincinnati, OH 45221-0025.
Metric properties of hyperbolic polar coordinates. Preliminary report.
We investigate spherical properties of hyperbolic geodesics by using hyperbolic polar coordinates for hyperbolic regions on the Riemann sphere. More precisely, we provide characterizations for hyperbolic regions on the Riemann sphere whose hyperbolic geodesics have similar properties as spherical geodesics. (Received August 30, 2004)

