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

1003-30-804 Zair Ibragimov* (ibragizs@math.uc.edu), Department of Mathematical Sciences, University of Cincinnati, PO Box 210025, Cincinnati, OH 45221-0025. Geometry of Möbius-Invariant Metrics.
We discuss several Möbius-invarian metrics. Examples of such metrics are the hyperbolic and Klein-Hilbert metrics, which have benn discovered as a result of scrutinizing the axioms of the Euclidean geometry. These metrics have proven to be very useful in the geometric function theory. The metrics that we are going to discuss are relatively recent discoveries in the same spirit as the above two metrics. While these metrics have also been found to be important tools in the geometric function theory, not much attention have been given to their geometry. For example, full description of their geodesics and isometries are still lacking. This will be the topic of our discussion. (Received September 29, 2004)