

1079-14-31

James S. Wolper*, Idaho State University, Pocatello, ID 83209-8085. *Information-theoretic Properties of the Periods of Hyperelliptic Curves*. Preliminary report.

The goal of the *Information Theoretic Schottky Problem* is to distinguish Jacobians from general Abelian Varieties by treating the period matrix as a signal and taking advantage of its intrinsic compressibility. This leads to a focus on the statistical distribution of the periods, which only makes sense for large genus.

This talk will present numerical evidence for conjectures, and some theorems, about the distribution of the periods of hyperelliptic curves. (Received November 22, 2011)