1062-65-270 **Yang Wang*** (`ywang@math.msu.edu`), Yang Wang, Department of Mathematics, Michigan State University, East Lansing, MI 48824-1270. *EMD Analysis of Visual Stylometry.*

In this talk we show how the tools of empirical mode decomposition (EMD) analysis can be applied to the problem of "visual stylometry," generally defined as the development of quantitative tools for the measurement and comparisons of individual style in the visual arts. In particular we introduce a new form of EMD analysis for images and show that it is possible to use its output as the basis for the construction of effective support vector machine based stylometric classifiers. We present the methodology and then test it on a collection of digital captures of drawings attributed to the great Flemish artist Pieter Bruegel the Elder (1525-1569), some of whose attributions are secure and some that are either known or suspected to be imitations. Our positive results indicate that this approach holds strong promise generally as a technique for visual stylometry. (Received August 10, 2010)