

1077-39-1087

Mary Michael Forrester* (forremm0@sewanee.edu). *Statistical functional equations in the plane.*

I will present some new results for statistical functional equations in the plane that generalize the mean value property of harmonic functions. The talk will focus on discretizations of these equations on uniform rectangular grids; an algorithm for the corresponding boundary value problem and existence and uniqueness results will be discussed. (Received September 16, 2011)