

962-30-662

John Feroe, Department of Mathematics, Vassar College, Poughkeepsie, NY 12604, **Benjamin A Lotto*** (belotto@vassar.edu), Department of Mathematics, Vassar College, Poughkeepsie, NY 12604, and **Charles I Steinhorn**, Department of Mathematics, Vassar College, Poughkeepsie, NY 12604. *Boxlike domains in the complex plane.*

The interplay between the geometry of a domain in the complex plane and the analytic properties of holomorphic functions defined on that domain is central in complex analysis. In this talk, we introduce a new class of domains in the complex plane that arise naturally from a generalization of one proof of Cauchy's Theorem. We call these *boxlike* domains. After making the appropriate definitions and proving the generalization, we give a geometric characterization of boxlike domains. Finally, we derive from this characterization a heuristic for identifying boxlike domains just by "looking" at them. (Received September 19, 2000)