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RESEARCH INTERESTS:

- Geometric function theory – Complex analysis
- Harmonic analysis
- Ordinary differential equations

CURRENT RESEARCH:

Currently, I am researching the properties of a certain class of quasiconformal mappings that transform the unit circle into a Jordan curve that has some desired geometric features. These types of Jordan curves are a subclass of quasicircles that admit no corner at any of its points; they are called symmetric quasicircles.

Another part of my research is the study of domains that can be mapped quasiconformally onto the unit ball or that can be extended to the boundaries of these domains. In this line of search, I am interested in finding out about the relationship between the QED domains and the Loewner Domains in Euclidean space.

SELECTED PUBLICATIONS:

- *The average number of maxima of a random sum of orthogonal polynomials*, Proc. Neural, Parallel & Scientific Computations, 1(1995) 403-406 (with M. Sambandham).
- *Quasiconformal mappings and domains with controlled modulus*, submitted to Journal of Applicable Mathematics.
- *Analytic characterization of symmetric quasicircles*, in progress.