

# Complex Function Theory



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B.S. in Mathematics and Statistics from Miami University (Ohio); Ph.D. and M.A. in Mathematics from University of Wisconsin – Madison

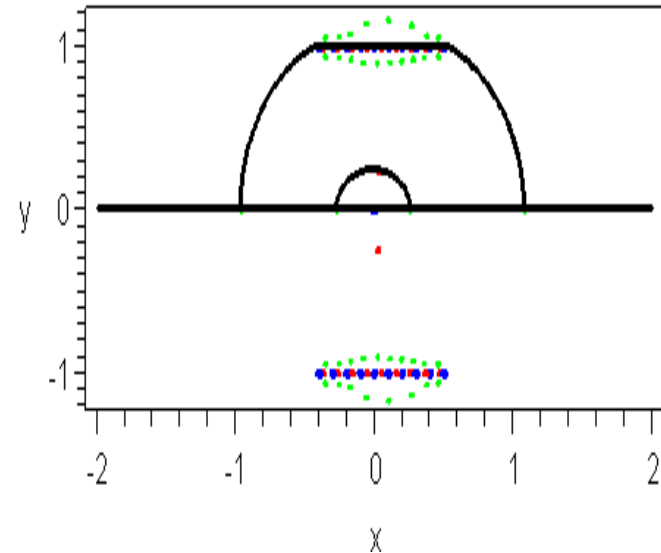
**Areas of expertise:** Complex Function Theory and Complex Analysis

#### Grants and Awards:

- AWM-NSF Mentoring Travel Grant (2003)
- University of Dayton Research Council Seed Grants (2002, 2003).
- Curriculum Consultant: Making Connections: Resources for K-12 Service-learning and Experiential Learning in STEM Disciplines, NSF 04-608 (2006-2008)
- Summer Research Grant Program for Pre-Tenure Women Faculty, UD (2003-1005)

#### Selected Publications:

- S. Edwards & S. Hellerstein, Non-real zeros of derivatives of real entire functions and the Pólya-Wiman conjectures. *Complex Var. Theory Appl.* **47** (2002), no. 1, 25--57.
- S. Edwards & R. Gordon, Extreme Curvature of Polynomials. *American Mathematical Monthly*, Vol. 111, No. 10 (Dec. 2004), 890-899.
- S. Edwards, M Ginn, J. Harris, G. Rhoads, Using Cellular Automata to Model Traffic. *DIMACS Educational Module Series*. (<http://dimacs.rutgers.edu/Publications/Modules/moduleslist.html>), 2004.
- S. Edwards, Using Level Curves to Count Non-real Zeros of  $F''$ . *Advances in Analysis: Proceedings of the Fourth ISAAC Congress, (Toronto, 2003)*, Int. Soc. Anal. Appl. Comput., World Scientific Publishing Co., Pte. Ltd., p. 531-537, (2005).
- A. Abueida, M. Daven, W. Diestelkamp, S. Edwards, D. Parker, Multi-designs for graph-triples of order 6. *to appear Congressus Numerantium*.



These are pictures of real and non-real zeros of real entire functions of finite order along with their level curves.

