

Taft Lecture

CHARLES
PHELPS
TAFT
RESEARCH CENTER
at the University of Cincinnati

Professor

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University of Washington – Seattle

Conformal Maps

Conformal maps have been used as a tool for solving a wide range of problems in natural sciences and engineering, from Mercator's map designed for compass navigation to analyzing two-dimensional lattice models in statistical physics. In this talk, we'll introduce simple conformal maps and show how to use them to build conformal maps of one region to another. This talk is designed for a general audience, assuming only some familiarity with complex numbers.

Thursday, April 1, 2010

4:00–5:00 pm

Room 527 Old Chemistry Building

*Please join us for refreshments before the lecture, 3:15–4:00 pm,
in the Max Kade German Cultural Center, Room 740 Old Chemistry Building*

Loewner, Welding, and Zippers

In the second talk, we'll discuss recent results about Loewner's differential equation and conformal welding. The key tool here is the zipper conformal mapping technique, a simple variant of which was introduced in the first talk. Application to shape recognition problems and Stochastic Loewner Evolution will be mentioned.

Friday, April 2, 2010

3:30–4:30 pm

Room 527 Old Chemistry Building

For more information, please visit:

<http://math.uc.edu/~herron/TRS-web-stuff/trs-main.htm>