

HOW TO DRAW A CONFORMAL MAP

A conformal map is one that preserves angles. In 1851 Riemann (almost) proved that any proper planar simply connected domain can be conformally mapped to the disk. This is the famous Riemann mapping theorem. Given an explicit domain how do we compute this map numerically? I'll discuss and illustrate a few of the many methods that have been developed between 1851 and 2011.

A PDF file of my slides can be found at

<http://www.math.sunysb.edu/~bishop/lectures/MathClub.pdf>