

Opportunities in Map-Making
Alan Saalfeld
The School of Earth Sciences at OSU

Abstract

Cartographers deal with distortion trade-offs all the time in choosing and drawing flat maps of curved regions. After I review the classic differential geometry of many of the most commonly used map projections, I will invite the audience to find ways to utilize and focus their own geometric expertise to extend the modern cartographer's mathematical machinery for map-making. I will try to briefly sketch what I see as possible opportunities to make new and better maps by using tools, techniques, and theory from such areas as quasi-conformal functions and approximations to conformality by means of circle packings.