



# Inversion Theory and Conformal Mapping

By David E. Blair

American Mathematical Society. Paperback. Book Condition: new. BRAND NEW, Inversion Theory and Conformal Mapping, David E. Blair, It is rarely taught in undergraduate or even graduate curricula that the only conformal maps in Euclidean space of dimension greater than two are those generated by similarities and inversions in spheres. This is in stark contrast to the wealth of conformal maps in the plane. This fact is taught in most complex analysis courses. The principal aim of this text is to give a treatment of this paucity of conformal maps in higher dimensions. The exposition includes both an analytic proof, due to Nevanlinna, in general dimension and a differential geometric proof in dimension three. For completeness, enough complex analysis is developed to prove the abundance of conformal maps in the plane. In addition, the book develops inversion theory as a subject, along with the auxiliary theme of circle-preserving maps. A particular feature is the inclusion of a paper by Caratheodory with the remarkable result that any circle-preserving transformation is necessarily a Möbius transformation - not even the continuity of the transformation is assumed. The text is at the level of advanced undergraduates and is suitable for a capstone course, topics course, senior...

**DOWNLOAD**



**READ ONLINE**

[ 7.12 MB ]

## Reviews

*This composed book is excellent. This really is for all who state that there had not been a worth reading through. Your life period will probably be change as soon as you total looking over this ebook.*

-- Cheyanne Barrows

*The book is fantastic and great. I have go through and i also am certain that i will planning to read through once more once more down the road. Its been printed in an exceedingly simple way and is particularly simply after i finished reading through this publication through which really changed me, change the way i think.*

-- Hank Powłowski