Dedication

To my parents

.Brothers and Sisters ,

Acknowledgement

First, I would like to thanks, supervised Dr: Emad Eldeen Abd Allaha AbdAlrhiem Who did not spare us for his information at all, and he was the best guide in this research and thanks go to all those who internalized the candles that lit up our lives and our way of life and success.

A finally thanks to those who lend a hand in contributing to research output in this way.

Abstract

Weconsder a complete rimannian manifold M with negative curvature ,and two properly immersed convex sudsets and of M ,then we discuss the asymptotic behavior of the number of common perpendiculars of length at most S from to , giving error terms and counting with weights .also we describe the relationship with counting problem in circle packings. Also we illustrate several airthemetic applications on the asymptotics of the number of representations of integer by binary .quadratic or Hamiltonian forms

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