

CONFORMALLY INDUCED MEAN CURVATURE FLOW

Jacob Reznikov
Master of Science

Mathematics and Statistics
McGill University
Montreal, Quebec, Canada

December 21, 2023

A thesis submitted to McGill University in partial
fulfillment of the requirements of the degree of a
Master of Science

© Jacob Reznikov, 2023

Contents

Abstract	3
Acknowledgements	4
Contribution	5
Introuction	6
Review of Literature	7

Abstract

The main

Acknowledgements

First I would like to thank my supervisor, Professor Pengfei Guan, for his regular assistance both before and after the start of my Masters program. He was always there to help me understand concepts I would otherwise spend weeks grappling with. Secondly, I would like to thank my collaborator, Doctor Joshua Flynn, without whom this project would have never happened. He would always chime in with timely ideas whenever we would get stuck. I would additionally like to thank my two good friends, Sam Zeitler and Bart Syroka for always being there to bounce ideas of or listen to my insane ramblings. Finally I would like to thank my family, and especially my mom, for always being there to help and support me whenever I would feel down and lost.

Contribution

This thesis and each chapter within was written solely by myself, with occasional assistance from colleagues regarding phrasing. The body of the thesis is largely taken from the paper co-authored by myself and Joshua Flynn.

Introuction

This thesis covers mean

Review of Literature

The field of Geometric Analysis is one vast with techniques and ideas to solve the hardest of problems relating geometric spaces and Partial Differential Equations (PDEs). One of the most influential techniques of the last couple of decades has been that of the geometric flow