

ACKNOWLEDGEMENTS

Firstly, I would like to express my sincere gratitude to my advisor Prof. José Andrade for the continuous support of my Ph.D. research, for his patience, motivation, and guidance. I could not have imagined having a better advisor and mentor for my Ph.D. research. Besides my advisor, I would like to thank the rest of my thesis committee—Prof. Nadia Lapusta, Prof. Domniki Asimaki, and Prof. Jean-Paul Ampuero—for their insightful comments, which helped widen my research from various perspectives. I also thank my lab-mates, for various stimulating discussions. In particular, I would like to thank Dr. Toktam Mohammadnejad and Reid Kawamoto, two of my lab-mates who were also my collaborators. Thanks must also go to Dr. Sergio Andres Galindo-Torres at University of Queensland, who was of great help during the initial period of my Ph.D. research.

I thank my friends, for being a support-system, and for all the fun we have had over the course of my Ph.D. I also thank the staff at the Mechanical and Civil Engineering department, as well as the staff at International Student Programs, who have been a helpful resource throughout my time at Caltech.

A special thanks goes to Brian Brophy and everyone associated with Caltech Theater. Theater has been a huge part of my life at Caltech, and has helped me in exploring my artistic side.

Last but not the least, I would like to thank my family—my parents and my sister—for being a constant pillar of support and encouragement throughout my life.