

Acknowledgments

It is a long, hard road to complete a PhD and it cannot be done alone. I would like to thank my advisor Dr. Vasili Kharchenko for all his help and guidance through the past years. From discussing planetary atmospheres and quantum phenomena to teaching me how to play tennis, Vasili has been not only a great mentor but also a great friend. Additionally, I would like to thank my co-advisors, Dr. Thomas Blum and Dr. Robin Cote. Their help and guidance throughout my dissertation writing and editing have been invaluable. My family has also been a great source of support throughout graduate school. Specifically, I would like to thank my father Kenneth Lewkow for installing an excellent work ethic in me as a young child and always helping me when school was difficult and enthusiasm was low. My brother Timothy Lewkow has also been a great source of support as well as a great friend who may easily discuss complex math concepts and data structures over late night conversations. Additionally, Dr. Elizabeth Sather and Genny Ray have been extremely supportive through the years, helping me keep tabs on my family in Colorado while studying on the east coast. Dr. Joshua Ladd has also been an amazing mentor throughout both undergraduate and graduate school, helping me realize my passion for high-performance computing and in turn directing my love of physics toward the framework of computational science. I would also like to thank all my fellow graduate and postdoctoral students at both the University of Connecticut and the Harvard-Smithsonian Center for Astrophysics for all the support and friendships throughout the years. Lastly, I would like to thank my friends from Bay State for being awesome roommates during the thesis writing process.

Scattering of Particles and Radiation in Astrophysical
Environments

Lewkow, N.R.

2016, XI, 106 p., Hardcover

ISBN: 978-3-319-25077-9