Acknowledgements

As for many theses, writing this thesis has led to some frustrations now and then (in particular towards the end). But most of the time, doing a PhD and writing this thesis has been quite an enjoyable experience for me. The work that was presented in this thesis would not have been possible without the help, inspiration and support of many people and in the last pages of this thesis I would like to express my gratitude to those people.

First and foremost, I would like to thank my promotors. Scott and Leon, I have always felt very honored to be your student and both of you have been a great supervisor to me. I think that the two of you form an excellent team, and the knowledge and experience that the two of you have, has been perfectly complementary for my project and my development as a scientist. Scott, your inexhaustible knowledge of astronomy and your contagious enthusiasm for this branch of science make you a very good teacher. During these four years (but also before), you have taught me a lot about astronomy and being a scientist. Although I will not continue to work in science for now, I will definitively continue to think like a scientist and in that respect some of the things that I learned over the last four years will be useful for the rest of my life. As a person, you have always been very friendly, patient and understanding, which makes working with you a real pleasure. Leon, during my bachelor and master I always felt that I kind of understood what Bayesian statistics was about. You showed me that I was wrong and in the past four years you have taught me a lot about Bayesian model comparison. Now I am again in a position where I think that I kind of understand Bayesian statistics, but based on previous experience I admit
that there is a nonzero probability that I do not completely understand it. You have always been very critical to my scientific writing and in that way you have taught me a lot about writing a paper and presenting my ideas to the scientific community. Your friendliness and sense of humour make working with you a very nice experience.

Special thanks go out to the members of the XSL team. Alexandre, Anaïs, Anke, Ariane, Jesus, Kristiina, Mariya, Mathieu, Mina, Omar, Patricia, Philippe, Reynier and Yanping, we have shared many telecons and have met in person during one of the busy weeks in Groningen, Strasbourg or Tenerife. I really enjoyed being part of this team and working together with all of you. Anaïs and Mariya, you allowed me to be a small link in the data reduction process of XSL where I worked on the telluric corrections of the spectra. Thank you for what has been a very enjoyable collaboration for me. Moreover, I would like to thank the two of you for the interesting scientific and non-scientific conversations that we shared together. Reynier, thank you for always being interested in my work, for asking many questions and also for being critical to my work.

Gergő and Rachel, thank you for working together with me on my second scientific paper. Chiara, thanks a lot for the collaboration that led to Chapter 4 of this thesis, for always being curious about my work and for sharing your enthusiasm about astronomy and in particular the IMF. Anaïs, Anke, Gergő, Gerjon, Judith, Kristiina, Mariya, Shoko and Wouter, I would like to thank you for all the scientific discussions, for sharing your work with me and for commenting on my work during the (more or less regular) weekly group meetings.

I am very grateful to the reading committee, Charlie Conroy, Reynier Peletier and Tomasso Treu, for accepting the task to read my thesis.

Although office 140 does not exist anymore, I consider myself very lucky to have been sharing this nice office for more than three years with Marisa, Smaran and Wouter. Wouter, I really enjoyed the conversations that we had and the fact that you are critical about almost everything. I would also like to thank you for your comments on the Dutch summary. Marisa, you have been there during almost the entire course of my PhD and I am very happy that you have been my office mate for all those years. Thank you for all the interesting conversations that we shared, for sharing your experiences about life in Italy, for always being very friendly to me and showing your interest in my work and life. Smaran, we did not share an
office for a long time but I have come to know you as a friendly person and 
would have been happy to have shared the office for a longer period of time.

I would like to thank the Computer Group, Eite, Leon, Martin, Valentin 
and Wim, for answering my questions and for always quickly solving any 
system-related problems that I encountered. A university can now and 
then be quite bureaucratic and I would like to thank the secretaries Christa, 
Gineke, Gonda, Hennie, Martine and Ramona for making sure that I mostly 
had to worry about my PhD and not about anything else. Lucia, thanks 
for showing interest in the progress of my thesis and the search for a new 
job in my final year.

The Kapteyn Institute has always provided a very pleasant working 
environment and during my PhD time many different people contributed 
to the fact that the Kapteyn Institute is such a nice place. I am deliberately 
not going to mention any specific names here, since I will most likely forget 
to mention someone. But if you have been at the Kapteyn Institute for the 
past four years, you have most likely contributed to making it a nice place 
and I would like to thank you for that.

I would like to thank my friends Bianca, Cathrin, Erwin, Hessel, 
Jantine, Karlijn, Lammert, Marcel, Marcel, Merel, René, Renske, Rianne, 
Rik and Ruud for providing the necessary distraction from my thesis over 
the last four years. With some of you, I have spent most of my Wednesday 
nights over the last years and sharing a pizza together and playing a game 
has always been a very enjoyable and relaxing moment for me.

Aske, Renze, Erwin, Frouke, Gijsbert and Hayo, bedankt voor de 
openheid en warmte waarmee ik binnen jullie familie ben ontvangen en 
voor jullie interesse in mijn onderzoek en mijn leven. Graag wil ik mijn 
familie, Remke, Ida, Alex en Hester bedanken voor de getoonde interesse, 
derondersteuning en mooie momenten die we samen gedeeld hebben. Susan 
en Teun, ik waardeer het enorm dat jullie speciaal voor mijn verdediging 
ziej teruggekomen van jullie grote reis. Bedankt voor alle leuke dingen 
die we de afgelopen jaren samen gedaan hebben. Susan, dank voor het 
controlieren van mijn Nederlandse samenvatting. Pap en mam, ik ben 
jullie enorm dankbaar dat jullie ervoor gezorgd hebben dat ik zorgeloos heb 
c kunnen opgroeien, dat jullie altijd vertrouwen hebben gehad in de keuzes 
die ik gemaakt heb, voor jullie interesse en voor de geboden ondersteuning. 
Zonder jullie was deze thesis nooit tot stand gekomen. Lieve, lieve Caroline, 
wat was het toch fijn dat ik de afgelopen jaren met jou heb mogen delen. 
Jij bent het beste dat me ooit overkomen is!