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## Structure and substructure in the stellar halo of the Milky Way

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# Curriculum Vitae

I was born on May 29th, 1986 in Logroño, La Rioja, in Spain. The first years of my life I grew up in the city of Madrid and the town of Chinchón, until my family finally settled down in Collado Villalba (province of Madrid). I attended most of my elementary school at the Integrated Programme at the Padre Antonio Soler Conservatory, a curriculum combining primary school and the four years elementary grade in music.

Next I attended secondary school at Colegio Santa María –while continuing my formal education in music as an external student for two more years– and Colegio Parque, where I won a national narrative award for the international programme "Europe at School". I completed my last year of high school at Colegio San Agustín (Madrid, 2004), where I graduated with First Class Honours.

Soon thereafter I enrolled in the Complutense University of Madrid (UCM) and its five years degree in Physics. On my first two years (2005 and 2006) I was awarded the Schollar of Excellence grant by the Community of Madrid. During the summer of 2009 I was a fellow for the Canary Astrophysics Institute (IAC) within their Introduction to Research programme. In 2010 I embarked upon a light-pollution research project as a collaboration fellow in the UCM Observatory. Finally, in September 2010 I graduated as a *Licenciada* in Physics with a major in Astrophysics. During my undergraduate years I was an active member of the Amateur Astronomers Association of the UCM (including vicepresident in 2007) and the Group for Planetary Sciences.

In the fall of 2010 I started my PhD research at Leiden Observatory (Leiden Sterrewacht) under the supervision of Prof. dr. Koenraad Kuijken. My thesis research has consisted of the study of the stellar halo of the Milky Way within the context of galaxy formation and galactic cannibalism. In particular, I have focused on parametrising the general structure of the halo and searching for tidal debris and satellites, using observations from international state-of-the-art telescopes. As an employee for Leiden Observatory, I have been an organizer of the National Astronomical Olympiad of 2012 and I have also been a teaching assistant for the Bachelor Research course (2012, 2013) and supervised two observing projects for the Bachelor Observing course (2014). In spring 2013 I was awarded a prize for Best Teaching Assistant of the Semester.

As of June 2015 I am switching careers and starting a job as a data scientist in London, United Kingdom.



# Acknowledgements

*What you get by achieving your goals is not as important as what you become by achieving your goals (Henry David Thoreau).*

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Sergio, Olmo, Pawel and some special friendships. Renske and Jesse, you have been my reference for everything Dutch, but more than that I appreciate having shared NOVA trips or salsa lessons, tips, goals and frustrations with you. For the 'Italian crew' –Silvia, Nicola, Marco, Alessandra, Fabio, Matteo, Thanja, Irene–, I would need more space than I possibly have to mention all the ways in which you have contributed to this thesis and my well-being. But lets say that learning to survive to the Dutch Winters and the PhD together, and sharing all the good experiences that come with it has been an outstanding experience. My office mates have been a great source of relief and *gezelligheid*: Ben, thanks for your positive mood and your patience towards those two annoying first year PhDs you were 'blessed' with; Silvia, I only wish I had got to know you earlier and better, and anyone moving into the office will be most lucky to have you as an office mate; Mattia, it's been a long and exhausting way, but I am happy I've had you to share so many thoughts, plans, hopes and random facts along the way. Among all the fun, friendly and attentive PhDs, a special thanks goes to Jeroen, Cristóbal, Clément, Vachail, Heather, Wendy, Carmen, David, Carl and Daniel H., for everything we have shared, and a big hug to those among the new batch I've had the chance to meet more: Gabriela, Aayush, Mieke and Eva. To my non-Sterrewacht friends, Fernando, Violeta, Bas and Theo, Alex, Tom and Emilio, you have provided me with many good moments, a fresh perspective and helped me keep the difficulties of a PhD in good perspective. Marion, having our paths come across has been both enriching and light-heartening. You are an outstanding professional and I thank you for having granted me with your unexpected friendship. Rhea, yours is one of those serendipitous friendships for which a blinking of the eyes would have been enough to miss on it, and I really cherish it. Dominique, Lorentz and Jannis, Andrea and Ludo: you've gone beyond the boundaries of friendship and made Leiden my home, and you are now forever the best kind of family, the type one gets to choose.

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I've had the privilege of sharing scientific enthusiasm, intellectual curiosity, many Thursday paellas and a countless number of mind-blowing or hilarious conversations with my colleagues and friends from ASAAF: Zeta, Raúl, Claudia, Elena, Garrido, Cristian, Álvaro, Belén, Marta, Pablo, Irene, Lucía, Guillermo, Judith, Idoia, Íñigo, Jesús R., Mario, Alexandru, Dapid, Rafa Cercedilla... I have also been extremely lucky to have my time in The Netherlands overlap with that of Adrián, and become much closer friends in the meantime. David, Álex, Paco,

Sara and Ángela: the last ten years with you go far beyond ASAAF and extend into the realms of adventures, dreams and challenges. Your friendship is thrilling and energising, honest, deep and grounding. And life needs of Napoleon, a jedi, a reflective lady, an eccentric poet and a rugby fighter to keep its balance.

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