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List of publications

Refereed Publications

Conference Proceedings & Other


I was born on April 14th, 1987 in Palo Alto, California, in the United States of America. I completed elementary school just south of San Francisco, and consequently moved up to beautiful wine country, and to the small town of Kenwood. Through both curricular and extracurricular activities, my love and passion for astronomy and human space flight grew. I graduated from Maria Carrillo High School in 2005, with Summa Cum Laude.

Next, I attended University of California Los Angeles into the Astrophysics degree program. There I completed two research projects in addition to two summer programs at the NASA Academy. I graduated with a Bachelors of Science in Astrophysics in 2009, with highest departmental honors and the Charles Goeffrey Hilton award for student of the year.

My next step was to begin a Master’s in Space Studies at the International Space University in Strasbourg, France. My Master's research project was completed at Leiden Observatory with Prof. dr. Alexander Tielens on Polycyclic Aromatic Hydrocarbons (PAHs) in a reflection nebula. I graduated from the program with a Master in Science in Space Studies in 2010.

In the fall of 2010, I began my PhD work in Sterrewacht Leiden (Leiden Observatory) under the supervision of Prof. dr. Frank Israel and Prof. dr. Paul van der Werf. My thesis work has focused on excitation mechanisms of gas in the interstellar medium, specifically focusing on observations with Herschel Space Observatory and the Spectrograph for INtegral Field Observations in the Near Infrared instrument (SINFONI) on the Very Large Telescope (VLT). During my PhD, I presented my work at international conferences in the Netherlands, France, Austria, Germany, the United State, and China.

In the fall of 2014, I will begin a Master of Science in Space Physiology and Health, with the intention of switching research fields to study and prevent the effects of space on the human body.
Receiving a doctorate in astronomy is something that I have been working towards for multiple decades and could not have been achieved without the love and support of friends, mentors, and family.

First, I would like to thank the people who made this possible, my parents. Mom and Dad, thank you so much for supporting me, both financially and emotionally through my (many) years of education. I thank you for understanding my choice to pursue an academic career, and especially one in the Netherlands. I realize it is not ideal to have a daughter living 5,500 miles away. That being said, I can’t believe how incredibly lucky I am to have parents that are both willing and able to come visit me and travel the world together. The memories we have made here will last a lifetime. I love you both so much! Brother, although you didn’t make it to visit me until my graduation itself, thank you so much for being there for me as my paranymph. Growing up together was not always the easiest, but we managed to get through it, and I love you all the more for it. Aunt Di & Uncle Michael, you have been such a large part of my life, and I really appreciate all your love and support. Every step of my journey, you’ve been there for me. Thank you for opening your home and your hearts to me, I am so lucky to have two sets of parents. Glenner, to my cuz with the travel bug, I’ve loved getting to see the world with you and am honored that you have taken the time to come see me and be a part of my life throughout the years. Grandpa Jim & Gram, thanks for always staying in touch and even coming to visit me in Paris, it was so fun to show you a bit of my European life. Papa & Grandma Paulette, thank you so much for sending messages, postcards, and packages, I always feel loved. Papa, you have inspired me to study science and engineering (as well as play basketball!), thanks for being so supportive.

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study English, I use the lessons you taught me on a daily basis. Moreover, you instilled a confidence in my writing skills that I never had. I appreciate both of you very much and think about how you influenced my accomplishments often.

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I would like to thank everyone at the Sterrewacht for fostering an open and active scientific community, the department is like no other. I would like to thank the members of the ISM group for including me in their discussions. A special thanks to Bram and Sebastiaan for always being available to discuss puzzling results, even though they were extragalactic. I would like to thank Xander Tielens, I appreciate your mentorship, both scientifically and about my career path. Olivier, I’ve had a really great time working with you over the past few years. You have continually inspired me to be excited by astronomy. Ryan, thanks so much for all of your advice over the years. I really appreciate your selfless willingness to help and encourage me, especially with fellowship applications. Finally, thank you to my supervisors Paul and Frank for many years of scientific discussions and guidance.

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