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## **Tales of Orion : the interplay of gas, dust, and stars in the interstellar medium**

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# Curriculum Vitae

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I was born on May 8, 1986 on the countryside of the municipality of Wijhe, the Netherlands, where I enjoyed most of my childhood. After moving to Schalkhaar and finishing high school in Deventer, I took a year off to retreat and prepare myself to make a well-thought decision for my future path.

I decided to move to Amsterdam to study Physics & Astronomy in 2005, a track that I finished 6 years later with a Master's thesis on massive star formation in collaboration with prof. dr. Lex Kaper. During the last year of my study, I was fortunate enough to be offered a position at the University of Leiden to work together with prof. dr. Xander Tielens on studying the photo-chemistry of polycyclic aromatic hydrocarbons, which I started in the fall of 2011. Due to several unforeseen factors, in particular because of my amazement after witnessing awe-inspiring images of the infrared sky, I quickly diverted from the path that was laid out for my years at the Sterrewacht. Instead, I started to study the interaction of stars with the interstellar medium of galaxies using multi-wavelength observations, a choice that has led to the very existence of this thesis. During my PhD, I have been a teaching assistant for the course Special Relativity during three academic years and co-supervised a master's thesis project. I have led successful observing proposals and performed on-site observations with the Isaac Newton Telescope on La Palma and twice with the Very Large Telescope in Chili. Lastly, I have visited my collaborators and presented my work in the Netherlands, France, Germany, Austria, and various institutes throughout the United States.

In the fall of 2015, I will move to the United States to continue my research on star formation and the interstellar medium at the Johns Hopkins University in Baltimore, Maryland.



# Publications

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## 1<sup>st</sup> author:

- [1] **B. B. Ochsendorf**, A. G. A. Brown, J. Bally & A. G. G. M. Tielens  
'*Nested shells reveal the rejuvenation of the Orion-Eridanus superbubble*'  
ApJ, 808, 111 (2015)
- [2] **B. B. Ochsendorf** & A. G. G. M. Tielens  
'*A bimodal dust grain distribution in the IC 434 H II region*'  
A&A 576, A2 (2015)
- [3] **B. B. Ochsendorf**, S. Verdolini, N. L. J. Cox, O. Berné, L. Kaper & A. G. G. M. Tielens  
'*Radiation-pressure-driven dust waves inside bursting interstellar bubbles*'  
A&A 566, A75 (2014)
- [4] **B. B. Ochsendorf**, N. L. J. Cox, S. Krijt, F. Salgado, O. Berné, J. P. Bernard, L. Kaper & A. G. G. M. Tielens  
'*Blowing in the wind: The dust wave around  $\sigma$  Ori AB*'  
A&A 563, A65 (2014)
- [5] **B. B. Ochsendorf**, L. E. Ellerbroek, R. Chini, O. E. Hartoog, V. Hoffmeister, L. B. F. M. Waters & L. Kaper  
'*First firm spectral classification of an early-B pre-main-sequence star: B275 in M 17*'  
A&A 536, L1 (2011)

## 2<sup>nd+</sup> author:

- [6] M. Kama, E. Caux, A. Lopez-Sepulcre, V. Wakelam, C. Dominik, C. Ceccarelli, M. Lanza, F. Lique, **B. B. Ochsendorf**, D. C. Lis, R. N. Caballero & A. G. G. M. Tielens  
'*Depletion of chlorine into HCl ice in a protostellar core*'  
A&A 574, A107 (2015)
- [7] N. L. J. Cox, J. Cami, L. Kaper, P. Ehrenfreund, B. H. Foing, **B. B. Ochsendorf**, S. H. M. van Hooff & F. Salama  
'*VLT/X-shooter survey of near-infrared diffuse interstellar bands*'  
A&A 569, A117 (2014)
- [8] L. Kaper, L. Ellerbroek, **B. B. Ochsendorf** & R. N. Caballero  
'*Studying the formation of massive stars with VLT/X-shooter*'  
AN 332, 3, 232 (2011)
- [9] B. Acke, M. Min, M. E. van den Ancker, J. Bouwman, **B. B. Ochsendorf**, A. Juhasz & L. B. F. M. Waters  
'*On the interplay between flaring and shadowing in disks around Herbig Ae/Be stars*'  
A&A 502, L17-L20 (2009)

