



# Aaron David Schneider

astrophysicist

## About Me

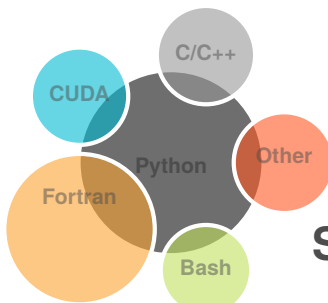
**nationality**  
german

**birthplace**  
Siegen, Germany

**birthdate**  
19.03.1996

**civil status**  
married, 1 child

## Programming



**github:**  
@AaronDavidSchneider

## Languages

**german**  
first language

**english**  
fluent

## Interests

hiking  
singing  
programming

## Education

10/15-08/18	<b>Bachelor in Physics</b>	Universität Heidelberg
	<ul style="list-style-type: none"><li>• grade: 2.0 (UK: B)</li><li>• specialization: astrophysics and computational physics</li><li>• bachelor thesis: Surface waves in protoplanetary disks induced by outbursts</li><li>• supervisor of thesis: Prof. Dr. Cornelis P. Dullemond</li></ul>	
10/18-10/20	<b>Master in Physics</b>	Universität Heidelberg and Max Planck Institute for Astronomy
	<ul style="list-style-type: none"><li>• grade: 1.5 (UK: A)</li><li>• specialization: Machine Learning and GPU Computing</li><li>• core courses: astronomical techniques, general relativity, theoretical astrophysics, cosmology, environmental physics</li><li>• master thesis: chemical composition of gas giants probed by accretion</li><li>• supervisor of thesis: Dr. Bertram Bitsch</li></ul>	
11/20-12/23	<b>Doctor of Science: Astronomy</b>	Københavns Universitet and KULeuven
	<ul style="list-style-type: none"><li>• title: Connecting the atmosphere with the interior in hot giant exoplanets</li><li>• Horizon 2020, Marie Skłodowska-Curie grant No 860470 (Chameleon)</li><li>• double degree program with Leuven and København</li><li>• supervisors: Dr. Ludmila Carone, Prof. Dr. Uffe Gråe Jørgensen, Prof. Dr. Leen Decin</li></ul>	

## Schooling

09/06-06/14	<b>Highschool</b>	Evangelisches Gymnasium Siegen-Weidenau
	<ul style="list-style-type: none"><li>• advanced courses: physics, math</li><li>• A-level: Grade 1.6 (UK: A)</li></ul>	

## Experience

09/14-06/15	<b>Year abroad</b>	Carnforth
	Theology studies	
2016-2019	<b>Private tuition</b>	Heidelberg
	Highschool math and physics	
2020	<b>Tuition</b>	Heidelberg
	Tuition of Introduction to Astronomy & Astrophysics II	
2023	<b>Art project</b>	København
	Computing the analemma for a sculpture made by danish artist Bjørn Nørregård	

## Fist-Author Refereed Publications

09/18	<b>Schneider, A. D.; Dullemond, C. P.; Bitsch, B.</b> Surface waves in protoplanetary disks induced by outbursts: Concentric rings in scattered light	A & A, Volume 617, id.L7
08/21	<b>Schneider, A. D. and Bitsch, B.</b> How drifting and evaporating pebbles shape giant planets I: Heavy element content and atmospheric C/O	A & A, Volume 654, id.A71
10/21	<b>Schneider, A. D. and Bitsch, B.</b> How drifting and evaporating pebbles shape giant planets II: volatiles and refractories in atmospheres	A & A, Volume 654, id.A72
02/22	<b>Schneider, A. D.; Carone L.; Decin L.; Jørgensen, U.G.; Mollière, P.; Baeyens, R.; Kiefer, S.; Helling, C.</b> Exploring the deep atmospheres of HD 209458b and WASP-43b using a non-gray general circulation model	A & A, Volume 664, id.A56
10/22	<b>Schneider, A. D.; Carone L.; Decin L.; Jørgensen, U.G.; Helling, C.</b> No evidence for radius inflation in hot Jupiters from vertical advection of heat	A & A, Volume 666, id.L11

## Other Refereed Publications

05/21	<b>Bitsch, B; Raymond, S. N.; Buchhave, L. A.; Bello-Arufe, A.; Rathcke, A. D.; Schneider, A. D.</b> Dry or water world? How the water contents of inner sub-Neptunes constrain giant planet formation and the location of the water ice line	A & A, Volume 649, id.L5
03/22	<b>Mollière, P.; Molyarova, T.; Bitsch, B.; Henning, T.; Schneider, A.D.; Kreidberg, L.; Eistrup, C.; Burn, R.; Nasedkin, E.; Semenov, D.; Mor-dasini, C.; Schlecker, M.; Schwarz, K. R.; Lacour, S.; Nowak, M.; Schu-lik, M.</b> Interpreting the atmospheric composition of exoplanets: sensitivity to planet formation assumptions	The Astrophysical Journal, Volume 934, Issue 1, id.74
09/22	<b>Bitsch, B.; Schneider, A. D.; Kreidberg, L.</b> How drifting and evaporating pebbles shape giant planets. III. The formation of WASP-77A b and $\tau$ Boötis b	A & A, Volume 665, id.A138
01/23	<b>Samra, D.; Helling, C.; Chubb, K. L.; Min, M.; Carone, L.; Schneider, A. D.</b> Clouds form on the hot Saturn JWST ERO target WASP-96b	A & A, Volume 669, id.A142
01/23	<b>Carone, L.; Lewis, D. A.; Samra, D.; Schneider, A. D.; Helling, C.</b> WASP-39b: exo-Saturn with patchy cloud composition, moderate metallicity, and underdepleted S/O	in review
06/23	<b>Sainsbury-Martinez, F.; Tremblin, P.; Schneider, A. D.; Carone, L.; Baraffe, I.; Chabrier, G.; Helling, C.; Decin, L.; Jørgensen, U. G.</b> Evidence of Radius Inflation in Radiative GCM Models of WASP-76b due to the Advection of Potential Temperature	accepted, not yet published

## Volunteer Engagement

2015-2019	<b>voluntary work at a christian university group</b> Hochschul SMD Heidelberg	Heidelberg
2022-	<b>sound engineering</b> local church	København