

Oliver Völkel

Nationality: German

Date of birth: 14/10/1994

Gender: Male

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EDUCATION AND TRAINING

Ph.D. Student

Max Planck Institute for Astronomy [01/01/2018 – Current]

Address: Heidelberg (Germany)

Thesis: Implementing a consistent model for planetesimal formation for planet population synthesis

M.Sc. in Physics

University of Tübingen [01/10/2016 – 30/09/2017]

Address: Tübingen (Germany)

Thesis: Moment methods for radiation hydrodynamics

B.Sc. in Physics

University of Tübingen [01/10/2012 – 30/09/2016]

Address: Tübingen (Germany)

Thesis: Dynamical friction in the common envelope phase

PUBLICATIONS

Effect of pebble flux-regulated planetesimal formation on giant planet formation

[2020]

<https://doi.org/10.1051/0004-6361/202038085>

A&A 642, A75 (2020)

Linking planetary embryo formation to planetesimal formation I. The effect of the planetesimal surface density in the terrestrial planet zone

[2021]

<https://doi.org/10.1051/0004-6361/202039214>

A&A 645, A131 (2021)

Linking planetary embryo formation to planetesimal formation II. The effect of pebble accretion in the terrestrial planet zone

[2021]

<https://doi.org/10.1051/0004-6361/202039245>

A&A 645, A132 (2021)

CONFERENCES AND SEMINARS

Physics of star formation - Heidelberg Harvard workshop

[virtual, 01/12/2020 – 03/12/2020]

Contributed poster

Planetesimal formation workshop

[virtual, 17/11/2020 – 20/11/2020]

Exoplanets III

[Heidelberg, Germany (virtual), 27/07/2020 – 31/07/2020]

Contributed talk

PPP2020 (Pebbles, Planetesimals and Protoplanets)

[Ringberg Castle, Germany, 08/03/2020 – 13/03/2020]

Contributed talk

From protoplanetary discs to planetary systems

[Ringberg Castle, Germany, 09/09/2019 – 13/09/2019]

Contributed talk

Extreme solar systems

[Reykjavic, Iceland, 19/08/2019 – 23/08/2019]

Contributed poster

International High Performance Computing Summer School

[Kobe, Japan, 07/07/2019 – 12/07/2019]

Contributed poster

Japanese German meeting on exoplanets

[Edesheim, Germany, 24/09/2018 – 28/09/2018]

Contributed talk

Computational fluid dynamics Summer School (HLRS)

[Siegen, Germany, 13/02/2016 – 17/02/2016]

TEACHING

Numerical methods in physics - UK-NUM

[01/03/2021 – 12/03/2021]

Tutoring, University of Heidelberg

Numerical methods in physics - UK-NUM

[10/02/2020 – 21/02/2020]

Tutoring, University of Heidelberg

Astronomy & Astrophysics

[11/04/2016 – 16/07/2016]

Tutoring, University of Tübingen

Physics lab for scientists

[12/10/2015 – 13/02/2016]

Tutoring, University of Tübingen

FURTHER EXPERIENCE

sci.an - <https://www.sci-an.com>

[01/10/2020 – Current]

In collaboration with other PhD Students I developed a virtual networking and meeting platform for scientists that is currently in use at the Max Planck Institute for astronomy.

Young researchers representative of the SPP1992

[28/02/2018 – Current]

Organising retreats and other events for the DFG funded SPP1992 - Exploring the diversity of exoplanets.

LOC-Member of the PPP2020 Conference

[08/03/2020 – 13/03/2020]

Ringberg Castle, Germany

Research visits at ELSI & NAOJ Tokyo, Japan

[16/07/2019 – 19/07/2019]

Research discussion and seminar talk.

Research visit at Southwest Research Institute - Boulder, Colorado

[10/02/2019 – 25/04/2019]

Extended research visit to work on planetary embryo formation.

Organizer of the SPP1992 Young researchers retreat

[2019]

Göttingen, Germany

LOC-Member of the Japanese German meeting on exoplanets

[24/09/2018 – 28/09/2018]

Edesheim, Germany

Organizer of the SPP1992 Young researchers retreat

[2018]

Jena, Germany

Research visit at IRFU, CEA-Paris-Saclay

[03/04/2017 – 07/04/2017]

Collaboration on M1 radiation transport & radiation hydrodynamics.

Student assistant at the department of astronomy & astrophysics - University of Tübingen

[01/10/2013 – 31/03/2014]

Reflectivity measurements of HESS telescope mirrors & data analysis.

LANGUAGE SKILLS

Mother tongue(s):

German

Other language(s): **English**