MARIE-LUISE STEINMEYER

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EDUCATION

Ph.D. in Planetary Science, *GLOBE institute, University of Copenhagen*, Denmark *since 10/20*
Topic: The role of envelopes during pebble accretion
Supervisors: Prof. Dr. Anders Johansen

M.Sc. in Physics, *Ruprecht Karl University*, Heidelberg, Germany *10/18 - 09/20*
Final grade: 1.3 - very good
Master's Thesis: Formation of planetesimals by gravitational collapse using the PENCIL-Code
Supervisors: Prof. Dr. Hubert Klahr, Prof. Dr. Anders Johansen
Thesis Grade: 1.3 - very good

B.Sc. in Physics, *Ruprecht Karl University*, Heidelberg, Germany *10/14 - 09/18*
Final grade: 1.3 - very good
Additional courses on geoscience
Bachelor's Thesis: The Impact of Temperature Evolution on Planetesimal Formation
Supervisor: Prof. Dr. Hubert Klahr
Thesis Grade: 1.0 - very good

RESEARCH EXPERIENCE

Research Internship, *Lund Observatory*, Lund *09/19 - 01/20*
Studying gravitational collapse of dust clouds using the PENCIL Code
Supervisor: Prof. Dr. Anders Johansen

Student Research Assistant, *Max Planck Institute for Astronomy*, Heidelberg *03/18 - 03/19*
Documentation and evaluation of the dust evolution model TWOPOPPY
Supervisor: Prof. Dr. Hubert Klahr

Projektpraktikum (Project Internship), *Max Planck Institute for Astronomy*, Heidelberg *04/17 - 12/17*
Planetesimal formation around the ice line
Supervisor: Prof. Dr. Hubert Klahr

PUBLICATIONS

Submitted papers
Steinmeyer and Johansen (2023)
"Sublimation of refractory minerals in the gas envelopes of accreting rocky planets" *in review in A&A*

PRESENTATIONS

CELS start-up meeting, Copenhagen,Denmark *09/21*
Primordial atmosphere of a protoplanet during pebble accretion

Ringberg Workshop: Pebbles, Planetesimals and Protoplanets, Schloss Rinberg, Germany *03/20*
Gravitational Collapse of Dust Filaments
`http://www.mpia.de/homes/klahr/PPP2020.html`

Joint Retreat of the Planet and Star formation Theory Group of the Max Planck Institute for

Astronomy and the Institute for Theoretical Astrophysics Heidelberg, Todtnauberg, Germany *03/18*
Temperature and Planetesimal Formation

POSTERS

Sublimation of refractory minerals in the gas envelopes of accreting rocky planets *04/23*
at: Protostars & Protoplanets VII *Kyoto, Japan*
The role of envelopes of rocky planets during pebble accretion *07/22*
at: Rocky Worlds II *Oxford, UK*
The role of envelopes of rocky planets during pebble accretion *05/22*
at: Exoplanets IV *Las Vegas, USA*
Evolution and Collapse of Particle Filaments *11/20*
at: Planetesimal Formation meeting *virtual*
`https://michiellambrechts.bitbucket.io/pfmeet.html`

ROLES OF RESPONSIBILITIES

Astronomy on Tap, Copenhagen, Denmark *since 01/22*
Volunteer
GLOBE Diversity Allies Programme
Steering Committee Core Member *since 01/21*
Interdisciplinary Workshop on Star and Planet Formation
Co-organiser of journal club *09/21 - 06/22*

SKILLS

Computer Skills
Word processing with Microsoft Office and LaTeX
Coding with Python (advanced) and Fortran (beginner)
Experience using the two-population dust evolution model TwoPopPy, the high-order finite-difference code for compressible (magneto-)hydrodynamics code Pencil, and the DISPATCH code framework

Languages
German (native Speaker), English (fluent), French (conversational), Danish (basic words and phrases)

REFERENCES

Prof. Dr. Anders Johansen *Globe Institute*, Copenhagen
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