

Dr. Bertram Bitsch

Research Group Leader at MPIA, Heidelberg, Germany

Königstuhl 17, 69117 Heidelberg, Germany

☎ +49 6221 528 427 ✉ bitsch@mpia.de 🏠 <http://www.mpia.de/~bitsch>

CURRENT POSITION

2018 - 2023 Independent Research Group Leader at the Max-Planck-Institute for Astronomy in Heidelberg (Germany) funded by my ERC starting grant

PREVIOUS POSITIONS

2014 - 2017 Senior Research Fellow at Lund Observatory (Sweden)

2011 - 2013 Postdoctoral Research Assistant at Observatoire de la Côte d'Azur, Nice (France)

EDUCATION

2011 PhD in Physics from Tübingen University (Germany)

Thesis: "Planet-disc interactions in radiative discs"

Supervisor: Prof. Dr. Wilhelm Kley

2008 Diploma degree (Master equivalent) in Physics from Tübingen University

Thesis: "Radiation hydrodynamics in protoplanetary discs"

Supervisor: Prof. Dr. Wilhelm Kley

RESEARCH GRANTS

2020 DFG Grant for a 3 year post-doc position in the DFG Priority Program "Exploring the Diversity of Extrasolar Planets" (SPP 1992, 300.000 EUR)

2017 ERC starting grant of the European Research Council (1.500.000 EUR) at the ERC-2017-STG call, grant number 757448 - PAMDORA

2014 Computation grant of the Royal Physiographic Society in Lund (168.000 SEK)

2011 2 year research grant of the *Nachwuchsförderprogramm* of the Carl-Zeiss Foundation (160.000 EUR), 2011, denied to go to Nice

PUBLICATIONS

2009– 22 first author papers, 13 papers first authored by students, and numerous co-authored papers in A&A, ApJ, MNRAS and others, h-index of 28, total of over 2800 citations

SUPERVISION OF POSTDOCS

2021– Dr. Jingyi Mah (MPIA, Heidelberg)

2019– Dr. Gabriele Pichierri (MPIA, Heidelberg)

SUPERVISION OF PHD STUDENTS

2018– Camille Bergez-Casalou (MPIA, Heidelberg, ongoing)

2018– Sofia Savvidou (MPIA, Heidelberg, ongoing)

2017 - 2021 Nelson Ndugu (Mbarara University, Uganda)

2015 - 2020 Matthäus Schulik, co-supervisor (Lund University)

SUPERVISION OF MASTER STUDENTS

2022 - 2023 L.A. Hühn (Master Thesis, Heidelberg University, start 10.1.2022)

2021 - 2022 J. Müller (Master Thesis, Heidelberg University, ongoing)

2021 - 2022 C. Zimmermann (Master Thesis, Heidelberg University, ongoing)

2020 - 2021 H. Knierim (Master Thesis, Heidelberg University, ongoing)

2019 - 2020 A. D. Schneider (Master Thesis, Heidelberg University)

2017 - 2018 S. Savvidou (Master Thesis, Lund University)

2016 - 2017 D. Wallsby (Master Thesis, Lund University)

2015 - 2016 N. Ndugu (Master Thesis, University of Mbarara, Uganda)

SUPERVISION OF BACHELOR STUDENTS

2021 - 2022	L. Chatziastros (Bachelor Thesis, Heidelberg University, ongoing)
2020	R. Gabriel (Bachelor Thesis, Heidelberg University)
2020	L.A. Hühn (Bachelor Thesis, Heidelberg University)
2020	J. Müller (Bachelor Thesis, Heidelberg University)
2019 - 2020	V. Mader (Bachelor Thesis, Heidelberg University)
2019	T. Baumann (Bachelor Thesis, Heidelberg University)
2018	H. Knierim (Bachelor Thesis, Heidelberg University)
2017	R. Forsberg (Bachelor Thesis, Lund University)
2016	E. Dahlöf (Bachelor Thesis, Lund University)

ORGANISATION OF SCIENTIFIC MEETINGS

2021	Main Organiser for “The formation of the solar system”, Ringberg, Germany, 2021
2021	Member of the Scientific Organising Committee for “XVIth Rencontres du Vietnam. Planetary Science: The Young Solar System” in Quy Nhon, Vietnam
2020	Member of the Scientific Organising Committee for the IMPRS summer school in Heidelberg, Germany
2019 - 2020	Member of the Local Organising Committee for “Exoplanets III” in Heidelberg, Germany, 2020
2019	Main Organiser for “From protoplanetary discs to planetary systems”, Ringberg, Germany, 2019
2015	Member of the Local Organising Committee for “Exoplanets in Lund 2015”

TEACHING ACTIVITIES

2018–	“Physics of planet formation“, Bachelor course, Heidelberg University (Germany)
2018–	”Numerical methods“, Bachelor course, Heidelberg University (Germany)
2017	“Theoretical topics in astrophysics”, PhD course, Lund University (Sweden)
2015–	Invited lectures about “Planet formation” at summer schools in Moletai Observatory (2015); Heidelberg (2016), Copenhagen (2019)
2014	Course responsible for “Planetary systems” at Master level (University of Mbarara, Uganda)

OBSERVATIONAL PROPOSALS

2021	Mineral clouds in the atmosphere of the hot Jupiter HD189733b (PI: Michiel Min (Amsterdam); co-I: BB)
2018	Do big stars make big planets? A complete census of Sco-Cen B-type stars with SPHERE (PI: Markus Janson (Stockholm); co-I: BB)
2018	Detailed chemical abundances of wide binary stars: constraints on the scenario and model of planet formation (PI: Fan Liu (Lund); co-I: BB)

PUBLIC OUTREACH

2021	Public lecture, <i>What do gaps and rings tell about planet formation?</i> , online, Faszination Astronomy, Heidelberg
2021	Public lecture, <i>Formation of Super-Earths and Mini-Neptunes</i> at Ilser Bhopal Astronomy Club, India, online
2019	Public lecture, <i>The search for Earth 2.0</i> at Olbersgesellschaft, Bremen, Germany
2019	Public lecture, <i>The search for Earth 2.0</i> at Nordenhamer Sternfreunde, Nordenham, Germany
2015	Public lecture, <i>The formation of the Earth</i> at Kulturnatten, Lund, Sweden
2015	Public lectures for high school pupils, <i>The formation of the Solar System</i> , Lund, Sweden
2014	Public lecture, <i>The formation of the Solar System</i> at Kulturnatten, Lund, Sweden

COMMISSIONS OF TRUST

- 2018– Main organiser for the MPIA summer internship program:
<http://www.mpia.de/en/careers/internships/summer>
- 2015– Referee for research grants for: Agence Nationale de la Recherche (France), NASA NSPIRES (USA), Alexander von Humboldt-Foundation (Germany), PRACE (European computation grants), DIRACRAC (United Kingdom computation grants), GIF (German-Israeli Foundation for Scientific Research & Development)
- 2012– Referee for international journals Nature Astronomy, Astronomy & Astrophysics, Monthly Notices of the Royal Astronomical Society, The Astrophysical Journal

LANGUAGES

German (native), English (fluent), Swedish (very basic), French (very basic)

INVITED TALKS (Seminars and Conferences)

- 2021 Caltech GPS Division Seminar, USA, remotely
2021 European Astrobiology Institute, Europe, remotely
2021 Astrophysics Seminar, ICG Portsmouth UK, remotely
2020 Astronomy Seminar, Sao Paulo State University (UNESP), remotely
2020 Astronomy Seminar, Observatoire de la Côte d'Azur, Nice, remotely
2020 RUTD Conference, Munich, Germany, remotely
2020 European Astronomical Society Annual Meeting, Session S1, Leiden, Netherlands, remotely
2019 Astrophysics Seminar, DTU, Copenhagen, Denmark
2019 Astronomy Seminar, Porto University, Porto, Portugal
2019 Astronomy Seminar, Braunschweig University, Braunschweig, Germany
2019 Space Research & Planetary Sciences seminar, Bern University, Bern, Switzerland
2019 University Observatory Munich Colloquium, University Observatory Munich, Munich, Germany
2018 Königstuhl Kolloquium, Max-Planck-Institute for Astronomy, Heidelberg, Germany
2018 Astronomy & Astrophysics Seminar, University of Tübingen, Tübingen, Germany
2018 Astronomy Seminar, Observatoire de la Côte d'Azur, Nice, France
2017 Exoplanets and planet formation, Shanghai, China
2017 The Early History of Planetary Systems and Habitable Planets, Tartu, Estonia
2017 Protoplanetary disk formation and evolution: setting the stage for planet formation, Leiden, Netherlands
2017 Comet formation paradigm after Rosetta: What is the hallmark of cometary nuclei formation in protoplanetary discs inherited from Rosetta?, Sofia, Bulgaria
2017 Atmospheres of Disks and Planets: Chemistry, Dynamics and Observations, Ringberg, Germany
2017 Planet and Star Formation Seminar, Heidelberg, Germany
2017 Planet and Star Formation Seminar, Heidelberg, Germany
2016 Earth-Life Science Institute Seminar, Tokyo, Japan
2016 Missing links from disks to planets, Budapest, Hungary
2016 Planet formation and evolution, Duisburg, Germany
2015 Astronomdagarna, Uppsala, Sweden
2015 Astronomy Seminar, Laboratoire d'Astrophysique de Bordeaux, Bordeaux, France
2015 Astronomy & theoretical physics Seminar, Lund University, Lund, Sweden
2015 Astronomy & Astrophysics Seminar, University of Tübingen, Tübingen, Germany
2015 Astronomy Seminar, Observatoire de la Côte d'Azur, Nice, France
2015 Experimental geophysics Seminar, Institute de physique du globe de Paris, Paris, France
2015 Astronomy and Astrophysics Seminar, University of Stockholm, Stockholm, Sweden
2014 Astronomy Seminar, Observatoire de la Côte d'Azur, Nice, France
2014 Astrophysics Seminar, University of Tübingen, Tübingen, Germany
2013 Astronomy & Astrophysics Seminar, University of Tübingen, Tübingen, Germany
2013 SwRI Boulder Colloquia, Southwest Research Institute, Boulder, CO., USA
2013 DAMTP Astrophysics Seminar, University of Cambridge, Cambridge, UK
2011 EPSC-DPS Joint Meeting, Nantes, France
2011 Astronomy Seminar, Observatoire de la Côte d'Azur, Nice, France
2010 Astrophysics Seminar, University of Helsinki, Helsinki, Finland

REFERENCES

- 1) Prof. Dr. Anders Johansen (Copenhagen University), +45 35 32 10 50,
anders.johansen@sund.ku.dk
- 2) Dr. Alessandro Morbidelli (Nice Observatory), +33-4-9200 3051,
morby@obs-nice.fr
- 3) Prof. Dr. Wilhelm Kley (University of Tübingen), +49 7071 29 74007,
wilhelm.kley@uni-tuebingen.de