

Dr. Bertram Bitsch

Research Group Leader at MPIA, Heidelberg, Germany

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CURRENT POSITION

- 2023 – Full Professor of Astrophysics, University College Cork (Ireland)
- 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

- 2022 MPG prolongation of the ERC group at the MPIA for 2 years (673.000 EUR), PI: Bertram Bitsch
- 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– 23 first author papers, 15 papers first authored by students, and numerous co-authored papers in A&A, ApJ, MNRAS and others, h-index of 33, total of over 3900 citations

SUPERVISION OF POSTDOCS

- 2021– Dr. Jingyi Mah (MPIA, Heidelberg, ongoing)
- 2019 - 2022 Dr. Gabriele Pichierri (MPIA, Heidelberg)

SUPERVISION OF PHD STUDENTS

- 2022– Julia Lienert (MPIA, Heidelberg, ongoing)
- 2018– Sofia Savvidou (MPIA, Heidelberg, ongoing)
- 2018 - 2022 Camille Bergez-Casalou (MPIA, Heidelberg)
- 2017 - 2021 Nelson Ndugu (Mbarara University, Uganda)
- 2015 - 2020 Matthäus Schulik, co-supervisor (Lund University)

SUPERVISION OF MASTER AND BACHELOR STUDENTS

- 2022 - 2023 M. Eberlein (Master Thesis, Heidelberg University, ongoing)
- 2022 - 2023 L.A. Hühn (Master Thesis, Heidelberg University)
- 2022 - 2022 C. Danti (Master Thesis, Padova University)
- 2021 - 2022 J. Müller (Master Thesis, Heidelberg University)
- 2021 - 2022 C. Zimmermann (Master Thesis, Heidelberg University)
- 2020 - 2021 H. Knierim (Master Thesis, Heidelberg University)
- 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)
- 2021 - 2022 L. Chatziastros (Bachelor Thesis, Heidelberg University)
- 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
- 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
- 2019 Main Organiser for “From protoplanetary discs to planetary systems”, Ringberg, Germany
- 2015 Member of the Local Organising Committee for “Exoplanets in Lund 2015”

TEACHING ACTIVITIES

- 2023– “Optics 3101”, 3rd year module, University College Cork (Ireland)
- 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), Hanau (2022)
- 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 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

- 2022 Public lecture, *Are we special?*, Rosenheim, Germany
- 2021 Public lecture, *What do gaps and rings tell about planet formation?*, online, Fascination Astronomy, Heidelberg
- 2021 Public lecture, *Formation of Super-Earths and Mini-Neptunes* at Ilser Bhopal Astronomy Club, India, online
- 2019 Public lecture, *The search for Earth 2.0* at Olbersgesellschaft, Bremen, Germany
- 2019 Public lecture, *The search for Earth 2.0* at Nordenhamer Sternfreunde, Nordenham, Germany
- 2015 Public lecture, *The formation of the Earth* at Kulturnatten, Lund, Sweden
- 2015 Public lectures for high school pupils, *The formation of the Solar System*, Lund, Sweden
- 2014 Public lecture, *The formation of the Solar System* at Kulturnatten, Lund, Sweden

COMMISSIONS OF TRUST

- 2018 - 2022 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)

- 2023 Biannual European Astrobiology Conference, May, La Palma, Spain
- 2022 Astronomy Seminar, Astrophysics Research Center of the Open University, Israel, remotely
- 2022 Astronomy Seminar, Observatoire Astronomique de Strasbourg, France
- 2022 XXI Colòquio Brasileiro de Dinamica Orbital, CBD0, Sao Paulo, Brazil, remotely
- 2022 Formation and Evolution of Planetary Systems, Tübingen, Germany
- 2022 Planet Formation Seminar, Naples, Italy, remotely
- 2021 Königstuhl Kolloquium, Max-Planck-Institute for Astronomy, Heidelberg, Germany
- 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