

10 Years of LISA Pathfinder: Early-Career continuations behind the Launch

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In LPF, early-career researchers had worked hard and earned their doctoral degrees. They went on to diverse fields and career paths, yet the time spent in the LISA team remained a defining part of their lives. Here, we listen to the voices of LISA’s Alumni.



2005 LTP Workshop Trento

2010 LISA Group at AEI Hannover

2013 DPG Hannover, AEI LISA Team

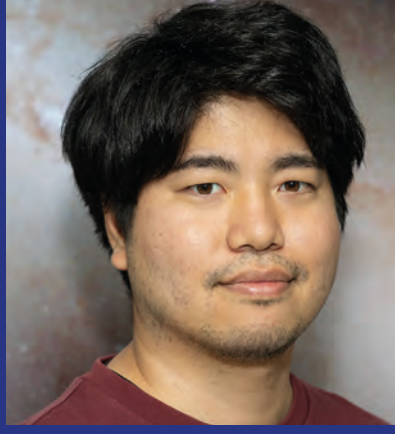
2018 LISA Pathfinder Results meeting in Trento

Dr. Markus Otto (2016)
Lecturer, Inst. for Gravitational Physics and Max Planck Inst. for Gravitational Physics (AEI Hannover)



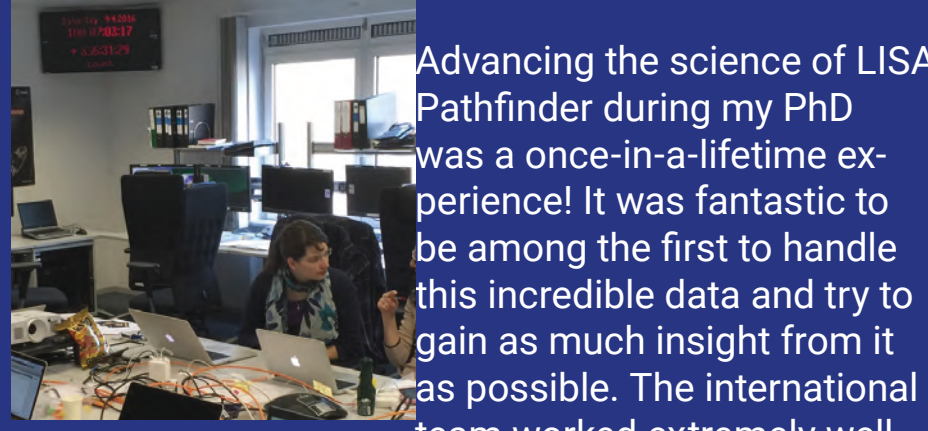
My PhD research focused on a key LISA issue: time-delay interferometry. Without a functioning TDI algorithm, LISA would only detect noise and not gravitational waves from the universe. Therefore, my work is a small but important part of the overall machinery. Besides, two fun facts concerning the date of my PhD thesis and disputation strengthen the connection further: on the one hand, I was the first person to use the present tense in my thesis when stating that ‘LISA Pathfinder is launched’. Secondly, I was the last PhD student to report on gravitational wave detection in the subjunctive. This again highlights my strong connection to LISA and LISA Pathfinder! :)

Dr. Kohei Yamamoto (2023)
Postdoctoral Research Associate, University of Maryland Baltimore County and NASA GSFC



LISA, such a large international mission, makes me feel that I’m always connected to people over the world, which is literally an irreplaceable treasure in my life.

Dr. Sarah Paczkowski (2020)
Postdoc at AEI Hannover, working in LISA Performance and Operations Team and LISA DDPC



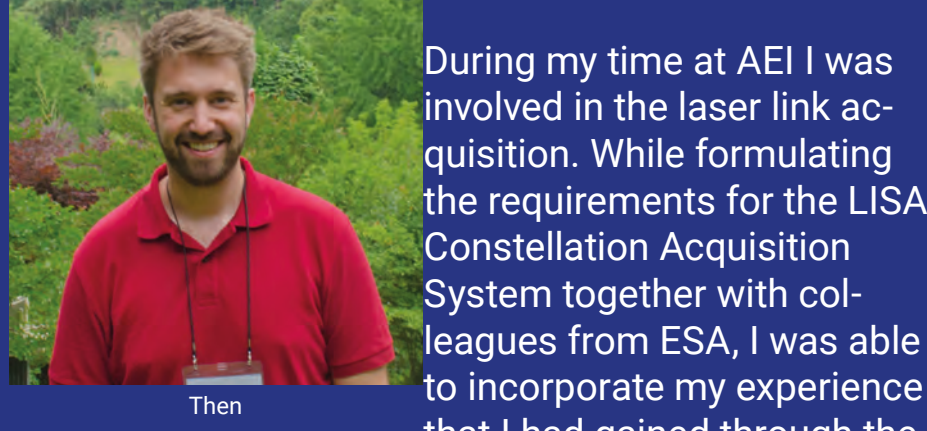
Advancing the science of LISA Pathfinder during my PhD was a once-in-a-lifetime experience! It was fantastic to be among the first to handle this incredible data and try to gain as much insight from it as possible. The international team worked extremely well together, across institutions, countries, and levels of experience. Over the past five years, I have used this experience to contribute to the advancement of LISA, and I hope to continue doing so. I would also like to take this opportunity to express my sincere gratitude to everyone who designed and implemented LISA and LISA Pathfinder long before I got involved, and who supported and continues to support my efforts.

Dr. Natalia Korsakova (2015)
Chaire de professeur junior, ARTEMIS lab at Observatoire de Côte d’Azur



As I still work on LISA I guess the impact is big, it was one true love for life :)

Dr. Alexander Koch (2020)
Acting Head of Department „Laser Interferometric Sensing“ at DLR Hannover



During my time at AEI I was involved in the laser link acquisition. While formulating the requirements for the LISA Constellation Acquisition System together with colleagues from ESA, I was able to incorporate my experience that I had gained through the GRACE Follow-On mission, which I had worked on for many years. This was truly a fascinating opportunity and it is great to see LISA moving forwards!

Dr. Lea Bischof (2022)
Postdoc at AEI Hannover Working on LISA



I am super fascinated by LISA and its goals and I appreciate a lot how working on this mission has enabled me to meet people all around the world and experience scientific and cultural exchange.

Prof. Dr. Sascha Skorupka (2007)
Professor for Physics and Technology, Fulda University of Applied Sciences



Being able to work on a satellite project was the fulfilment of a childhood dream. Even as a young boy, I was fascinated by rockets, space and science fiction. It was a great feeling to build something that would later fly “up there”, even if everyday life in the laboratory was sometimes very tedious because not everything worked straight away. When I later heard how successful the LISA Pathfinder mission had been - I hadn’t been at the AEI for a long time - I was very happy and proud that I had been able to make a small contribution.

Dr. Max Rohr (2022)
Scientist and Group Leader at the DLR Hannover



The work I did as part of LISA was my entry into the world of high-precision laser interferometry and thus laid the foundation for my further development toward my current position. (Translation from German; original text in German)

Dr. Anneke Monsky (2010)
Argonaut GNC Technical Manager, OHB SE Leading Guidance Navigation & Control team



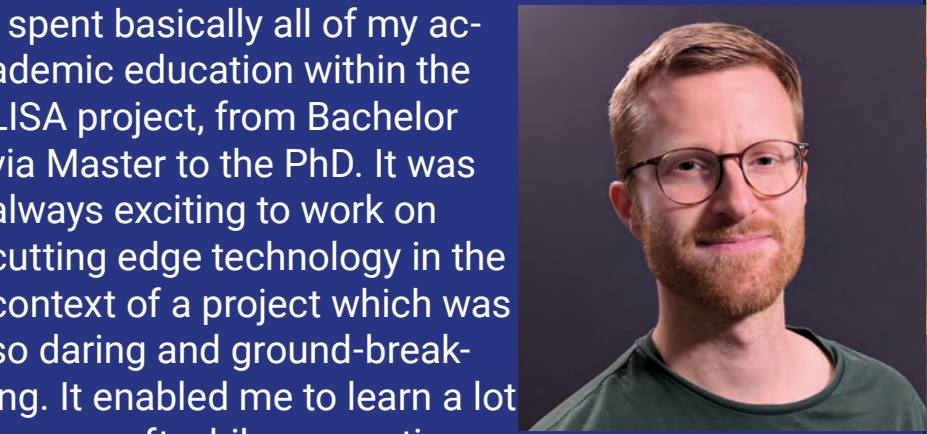
The competence I gained through Pathfinder for optical instruments, onboard experiments development, conduction of ESA projects in general let me fulfil my tasks for the Weather satellite programme MTG carrying optical instruments and relying on stable in orbit attitude. This lead to being responsible for the highly demanding science missions attitude performance PLATO. OHB was chosen as prime contractor for PLATO in 2019, and I worked on the proposal as well as on the design until System CDR. This is when I supported the Argonaut proposal from Jan 2024, which was also won. Since then I am responsible for the Argonaut GNC.

Dr. Maike Lieser (2017)
Experiment System Engineer in the PRODEX office, ESA-ESTEC



I did my PhD at the AEI in Hannover, working on the optical bench development for LISA. Afterwards I worked for Airbus in the UK and then started at ESA. In my current position I am working on the instrument development for multiple missions, and I’m happy I can also work on LISA again!

Dr. Thomas Schwarze (2018)
Postdoc at DLR Hannover



I spent basically all of my academic education within the LISA project, from Bachelor via Master to the PhD. It was always exciting to work on cutting edge technology in the context of a project which was so daring and groundbreaking. It enabled me to learn a lot in my craft while supporting fundamental research. Additionally, I met many lovely people and was gifted many cherished social connections through the LISA community. It all kickstarted my career and enabled me to take my next steps by moving to the University of Florida, USA and ultimately to the DLR.

Dr. Martin Staab (2023)
Postdoc at Utrecht University, Netherlands Working on data analysis pipelines for ET and LISA



LISA experience/impact on my life: I started to work in LISA during my master thesis in 2019. For me LISA always has been a very inspiring project given the science it will enable us to do and also the instrumental challenges that need to be solved. I’m excited to stay in the project as long as possible for the great and welcoming community and the results to come!

Dr. Frank Steier (2008)
LISA Spacecraft Lead System Engineer at OHB SE



LISA had a strong influence on my career. I learned about the mission during my studies and chose LISA to be focus of my research during my diploma and PhD. After moving to space industry, I kept my focus on demanding optical space missions and finally had the opportunity to return to the LISA project. The choice to go back to the roots of my career was very simple, and I am very excited to be part of the team who finally implements the mission.

Dr. Marie-Sophie Hartig (2022)
Performance Engineer, OHB SE, Oberpfaffenhofen



My LISA journey started in 2014 with an internship at the AEI. Later, I analysed the TTL coupling in LPF and LISA. Today, I am happy to continue working on LISA for the industry prime OHB. My personal LISA experience is that wherever you go, you find amazing and inspiring people to work with.

Prof. Dr. Antonio F. García Marín (2007)
Prof. and Director, Inst. of Aerospace Technology, Bremen University of Applied Sciences.



I came to Germany in 2002 for my PhD in LISA. I liked the work at AEI so much that I stayed until 2011, working on LISA and LISA Pathfinder. The project has impacted every phase of my career and life in many different ways: While working in the industry until 2020 I have always had LISA in my mind and supported the development of a science department able to participate in LISA. Now I am a professor and still use LISA as one of the most impressive missions in my lectures. My goal is to form aerospace engineers that can contribute to missions such as LISA.

Dr. Lennart Wissel (2023)
Postdoc at AEI Hannover Performance and Operations Group



LPF was a milestone - scientifically, and much more: not just to gain experience, but also to promote collaborative scientific work - with the important and right people for LISA! (Translation from German; original text in German)

Dr. Jan Niklas Reinhardt (2025)
Postdoc at AEI Hannover, in LISA P&O-Team. Working on LISA data processing and data simulation



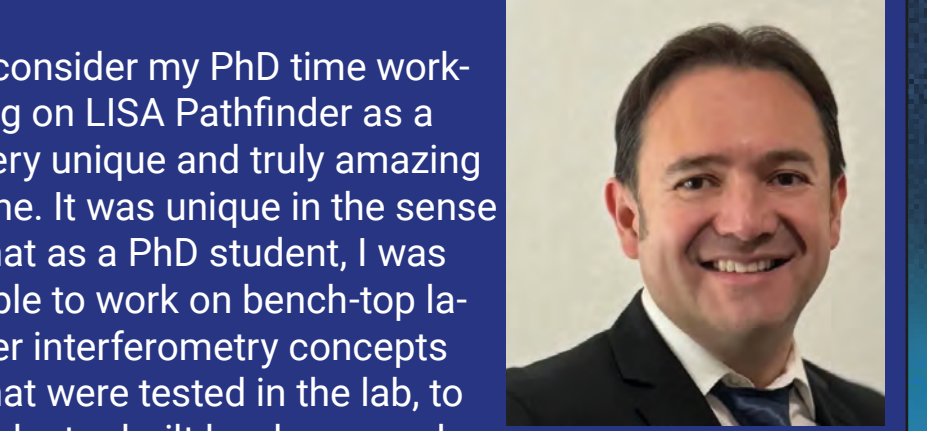
In my PhD, I investigated intersatellite ranging, clock synchronisation, and on-board delays in the context of time-delay interferometry. The LISA working environment is a melting pot of various disciplines. Working on LISA means learning something new every day.

Dr. Michael Tröbs (2005)
Technical customer advisor / coating designer, LASEROPTIK GmbH



I worked more than 16 years on LISA Pathfinder (LPF) and LISA. In the frame of my PhD thesis at Laser Zentrum Hannover I built the first prototype of a laser for LISA and stabilized it in frequency and power. At AEI I worked on LPF and LISA. For LPF I tested laser models and participated in milestone reviews. For LISA I tested fiber amplifiers and worked on several experiments such as optical bench testing, the fiber backlink and laser differential phase noise.

Prof. Dr. Felipe Guzmán (2009)
Full Professor and Jack Lee Jewell Endowed Chair in Optical Sciences, University of Arizona



I consider my PhD time working on LISA Pathfinder as a very unique and truly amazing one. It was unique in the sense that as a PhD student, I was able to work on bench-top laser interferometry concepts that were tested in the lab, to industry-built hardware such as Engineering and Flight models, accompanying the payload and mission development process of ESA and the aerospace industry, through many PDR, CDR, MRR reviews, to thermal-vacuum tests, all the way to an integrated and operational satellite. This was not just looking at the science and instrument development aspects, but I also had the challenge and privilege to actively participate in the mission development. The wealth of experience I accrued during that time is invaluable and ever since I have continued my involvement not just in LISA, but also with this community in many other exciting endeavors. It shaped my professional career, and also my vision to approaching collaborations in all aspects: academic, industrial, and international. Furthermore, I’ve had the privilege of working with many amazing scientists and human beings, that I’m grateful to call not only colleagues to this day, but also personal friends.

Prof. Dr. Katharina-Sophie Isleif (2018)
Junior Professor at Helmut Schmidt University, Hamburg, Germany



LISA was at the heart of my PhD and paved my way to a professorship. I’m now working on the Einstein Telescope and LIGO, still following LISA closely, and would be happy to contribute again to this exciting mission and wonderful community.

Prof. Dr. Oliver Gerberding (2014)
Associate Professor at University of Hamburg



LISA has been the dominating project in my scientific career. While I am now also working on projects such as the Einstein Telescope the realization and success of the amazing LISA mission will remain one of my major priorities.

Dr. Juan José Esteban Degado (2012)
Scientific Staff/Group Leader at AEI Hannover, Scientific instrumentation development for LISA



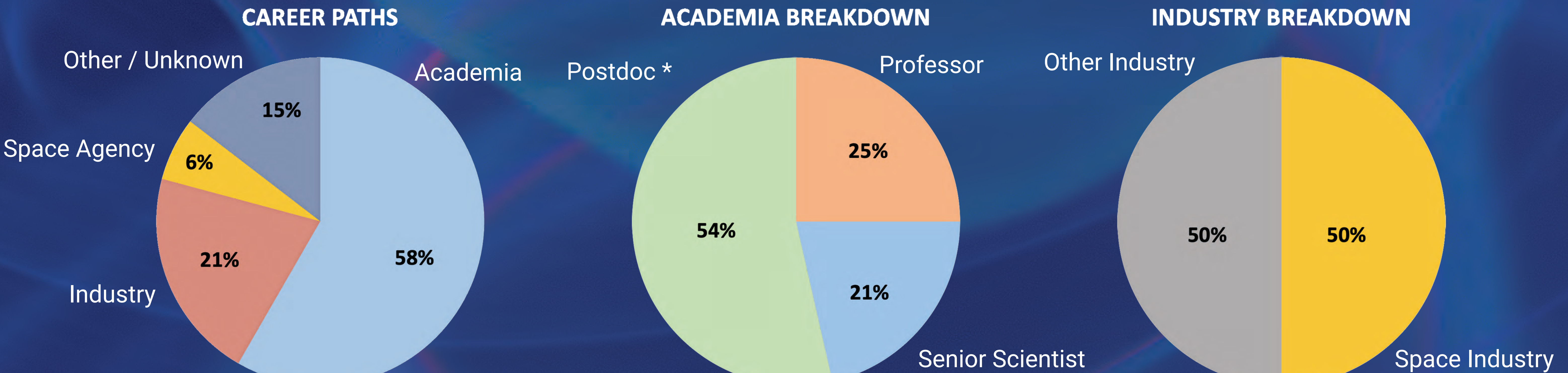
Being part of LISA Pathfinder was a formative step on my path toward LISA. It was the first time I witnessed how such a complex space mission evolved from its early instrumentation to an in-orbit demonstration, and it deeply influenced the way I approach precision instrumentation, systems engineering, and collaboration within industrial and international teams. The skills and mindset I had the opportunity to develop during that period remain central to my daily work. On a personal level, LISA Pathfinder also created a lasting sense of connection with the scientific community, planting the seeds of the strong motivation that continues to drive me today.

Dr. Christoph Bode (2024)
Postdoc at AEI Hannover, Development and verification of the LISA phasemeter



LISA has had a big influence on my career. While I have been “in the loop” of LISA/LPF developments ever since joining the AEI in 2016 for my master’s thesis, I only started actively participating in LISA with the start of my PhD project. Since then I have been working in the LISA phasemeter team, focusing on further development of the instrument from initial “off-the-shelves” prototypes to the now on-going industrialization of real space hardware. Through LISA I have met many interesting and inspiring people, have grown through challenges and just generally learned a lot.

Career paths of the LISA Alumni from Hannover



* Postdoc in Academia and Space Agency