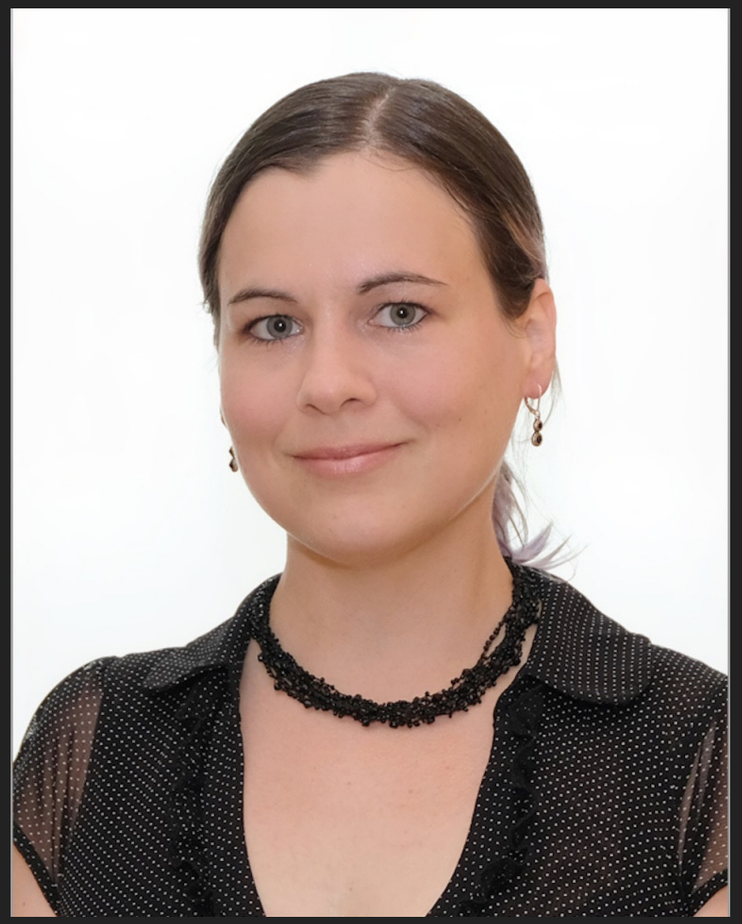
PANEL BIOS

INDUSTRY PERSPECTIVES

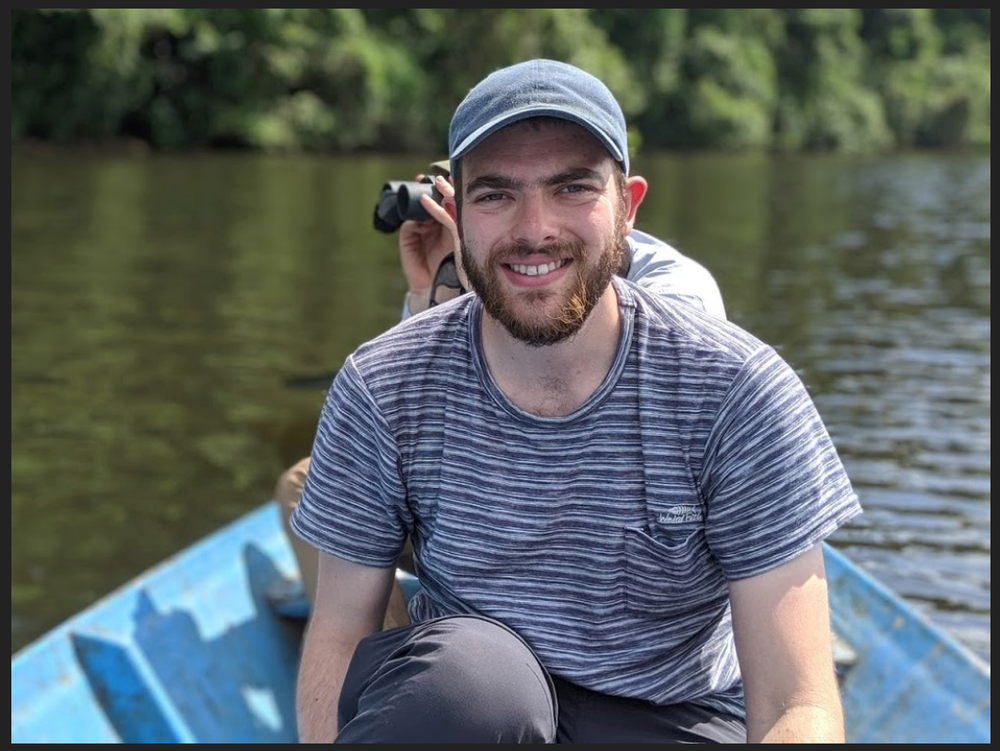
DR KAROLA BEJM



Dr. Karola Bejm joined the ATLAS collaboration in 2012 as a Master's student with the University of Dortmund, followed by a PhD for which she moved to CERN. During her PhD time she got involved in the operation of the ATLAS detector for the Large Hadron Collider (LHC), acting as shift leader for the whole ATLAS detector as well as on-call expert for the inner tracker. Afterwards she joined the University of Toronto as a Post-Doctoral Fellow and Senior Research Associate from 2017 to 2021, working for the High Energy Physics group.

Since 2022 Dr. Bejm works for Elmos, a semiconductor producer that develops integrated circuits for the automotive industry. Initially she started her career as a project manager but was promoted to group leader of the Project Management Office (PMO) service group after just a year.

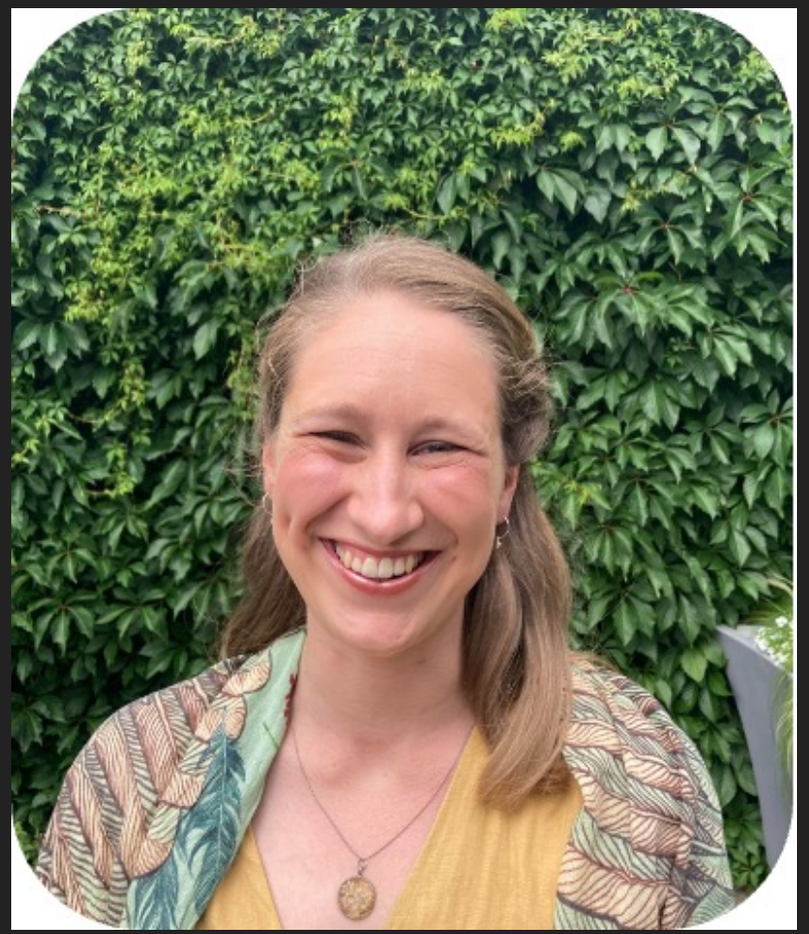
DR JON BURR



Jon is a software engineer at Mathworks. After obtaining his DPhil from the University of Oxford in 2018 working on the ATLAS experiment, Jon continued to work on ATLAS for a Research Fellowship at DESY from 2018-2021. Jon’s work in ATLAS focused heavily on the trigger and trigger software, as well as searches for SUSY. Following this, he moved to the University of Cambridge for a PostDoc working on the ANUBIS experiment alongside his work on ATLAS.

In 2023 he moved out of academia and became a software engineer at Mathworks, working on parallel computing.

DR ALIX FELL



In 2017 I began a PhD at the University of Sheffield studying photon induced WW boson production at the ATLAS experiment. I had a teaching scholarship at the University so I spent several hours a week teaching the first year undergraduate maths course alongside my research. As a PhD student, I developed my understanding of statistics and data science and contributed to the significant observation (8.4 sig) of photon-induced WW boson production in 2020. After submitting my thesis and gaining my PhD, I decided that I wanted to take a step away from academia in search of something more people-focussed. I leant into my teaching skills and worked as a tutor for a while, before finding a job as a Data Coach at a company called "Multiverse". Multiverse is a scale-up company that offers digital apprenticeships to a mix of career starters and career builders. My role is largely guiding and coaching apprentices through their Level 4 Data Analyst apprenticeship, however the fast-paced nature of a scale-up organisation means that no day is ever the same. We are driven by the needs of our clients, which means I have the opportunity to stay in touch with the latest data science tools and techniques industry. Whilst some days I spend my time teaching and coaching, other days I am applying my data skills to improve processes and identify strategies. I enjoy this role because it has a good mix of people-facing tasks and analytical tasks.

DR JAMES GRUNDY

Hi, I'm James! I'm in my second year on the Civil Service Fast Stream, working as an analyst on labour market policy at the Department for Work and Pensions. Before that, I completed a PhD at Oxford, searching for di-Higgs production on the ATLAS experiment.

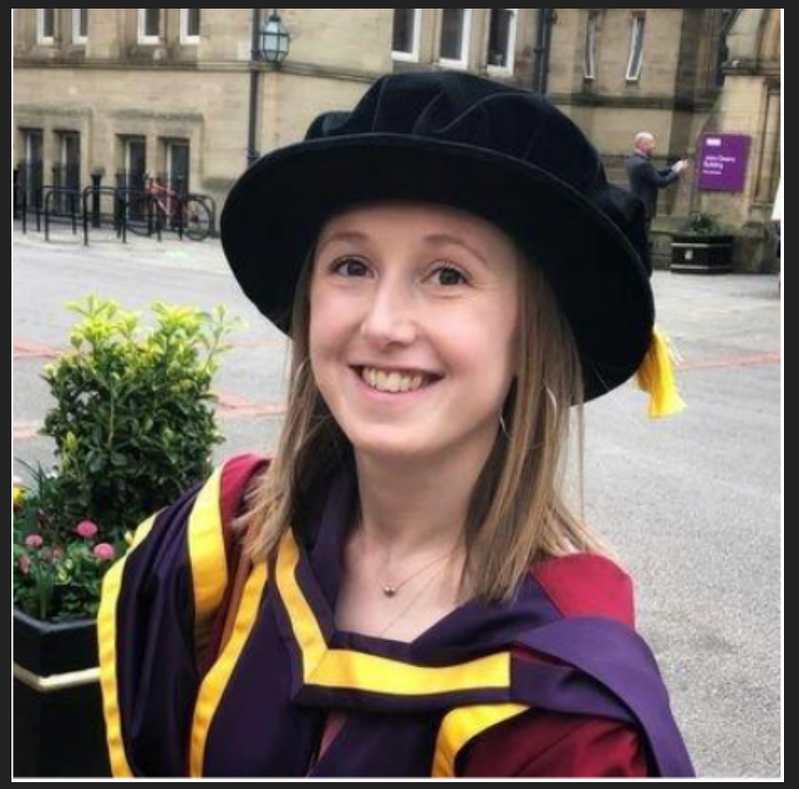
After finishing my PhD, I was keen to find a career that involved utilising analysis to help the public. I was lucky enough to gain a place on the UKRI Policy Internship programme, which introduced me to the Civil Service.

The Civil Service provides public services and helps develop Government policy but is politically impartial. I am a GORS (Government Operational Research Service) analyst, Operational Research encompassing a vast range of analytical techniques from the very technical, e.g., machine learning, to the more practical, e.g., how to structure problem questions.

In my day-to-day work, I utilise large government datasets to create new analytical evidence on what employment policy has the most benefits for our citizens. I then have to clearly communicate the results to policy makers, who are often not analysts.

I've found the Civil Service to be a warm and friendly environment, with a big focus on employee wellbeing. Additionally, it can be fast-paced and exciting, and it's not uncommon to find the projects you're working on in the papers!

DR MARTHA HILTON



I am a Particle Physicist with experience in the charity and public sector. I studied physics at Imperial College London.

After my undergraduate I worked for the social leadership charity RECLAIM in Manchester which works with working class young people on a leadership and development program.

I did my PhD at the University of Manchester on charm physics at LHCb during which time I also got involved in many diversity and early career initiatives including sitting on the Early Career Gender and Diversity committee for the LHCb collaboration.

After doing a Post Doc for a year I decided to leave academia and pursue a career in the public sector. I worked as a Senior Data Analyst for the Institute of Physics and have just taken a position as Senior Analyst at UKRI. As a state school educated woman in physics I have an active commitment to equality and diversity within the subject.

DR MIKE NELSON

Mike is the Head of High Liquidity Quantitative Research at Keyrock, where he also holds the role of Quantitative Researcher and Strategist. Prior to this, he was the Head of Quantitative Research at Voltz Labs, focused on fixed-income derivatives trading and modeling in decentralized finance. He also applied machine learning and data science to cryptocurrency markets and built quantitative strategies.

Before joining Voltz Labs, Mike was a Research Fellow at the University of Cambridge, in computational biology / biophysics. His research focus was to use Machine Learning to study genetic data and the development of cancer.

Prior to this, Mike was a Quantitative Researcher at Winton Capital.

Before leaving HEP, Mike obtained his DPhil from the University of Oxford, and was a Postdoctoral Research Fellow at Stockholms universitet, where he was a member of the ATLAS collaboration focusing on SUSY searches and hadronic jet reconstruction.