HOW TO SUPPORT EARLY CAREER SCIENTISTS IN A LARGE COLLABORATION (such as ATLAS)

Dr Christian Appelt 09 Jul 2024, EPS-HEP 2025 | Marseille

christian.appelt@cern.ch





ATLAS COLLABORATION IN NUMBERS SUPPORT FOR EARLY CAREER SCIENTISTS GENERAL REMARKS AND KEY ISSUES



Argentina Armenia Australia Austria Azerbaijan Brazil Canada Chile China Colombia **Czech Republic** Denmark France Georgia Germany Greece Israel Italy Japan Mongolia Morocco

Netherlands Norway Palestine Philippines Poland Portugal Romania Serbia Slovakia Slovenia South Africa Spain Sweden Switzerland Taiwan Türkiye UAE UK USA CERN JINR

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ATLAS Collaboration 177 institutions (243 institutes) from 40 countries

India Afghanistan Indonesia Algeria Argentina Iran Armenia Iraq Australia Ireland Israel Austria Italy Azerbaijan Bahrain Japan Kazakhstan Bangladesh Belarus Kenya Belgium Kyrgyzstan Botswana Latvia Brazil Lebanon Lithuania Bulgaria Madagascar Canada Chile Malawi China Malaysia Colombia Malta Croatia Mauritania Mexico Cuba Mongolia Cyprus Czech Republic Montenegro Morocco Denmark Nepal Ecuador Egypt Netherlands New Zealand Ethiopia Finland France Norway Georgia Pakistan Palestine Germany Paraguay Ghana Peru Greece Philippines Guatemala Poland Hungary Portugal Iceland

Romania Russia Rwanda San Marino Saudi Arabia Senegal Serbia Slovakia Slovenia South Africa South Korea Spain Sri Lanka Sudan Sweden Switzerland Syria Taiwan Thailand Türkiye Turkmenistan Ukraine UAE Uganda UK Uruguay North Macedonia USA Uzbekistan Venezuela Vietnam Yemen Zambia Zimbabwe

TLAS Collaboration member nationalities Over 5900 members of 103 nationalities





STAFF

Administrator/other	139
Engineer with PhD	373
Engineer without PhD	563
Physicist	2383
Technician	358
Total	3816

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ATLAS MEMBERS 08.07.2025

STUDENTS

Engineering student	102
Physics PhD student	1148
Physics masters/diploma student	473
Undergraduate/summer student	585
Total	2308





ATLAS MEMBERS

Early career scientists = all students + all scientists $(\leq 10 \text{ years after final degree})$

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AGE



EDI public plots



IMAGINE YOU ARE AN EARLY CAREER SCIENTIST











YOU WOULD NEED HELP

***** Integrating into the collaboration

★ Connecting with other early career scientists



THE GOAL: EVERY EARLY CAREER SCIENTIST HAS EQUAL OPPORTUNITIES INDEPENDENT OF THEIR BACKGROUND

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"EQUAL SUPPORT FROM COLLABORATION AND HOME INSTITUTE



COLLABORATION BOARD



★ Elections and decision taking

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***** "Government"

★ Chair: Spokesperson

ECUTIV EX BOARD





The ATLAS Early Career Scientists Board (ECSB)

2015

Study 'Diversity in the ATLAS Collaboration, and how to improve it'

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PAVINGTHEWAY



- **Represent common interests of the early career scientists**
- **Advise the Collaboration Board and the ATLAS Management** on any matters that concern the early career scientists
- Gather regular feedback [...] and propose specific actions to the collaboration [...]





460+ hours of 7+ people discussing a more inclusive ATLAS for early career scientists



many more events along the way

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16

PILLARS OF SUPPORT







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1993 ALICE EARLY 2013 CAREER SCIENTISTS

FORA 3 Apr 2018: first meeting

★ Events

***** Networking



CMS

1992

2017



TAKEAWAY MESSAGES

collaboration, form one tomorrow!

timely project success and mental well-being.

- If you don't have a representative body for early career scientists in your
 - This will help to continuously discover and fix problems and to remove barriers.
- Early career scientists want to be involved. Find ways to integrate them into strategic long-term and day-to-day decision-making.
 - This will lead to the feeling of belonging, identification, and ownership.
 - Keep the project load manageable; excessive involvement can jeopardise
 - This will prevent burnout and foster a sustainable work culture, allowing for a sense of control to be regained.







KEYPROBLEMS

LACKOF CAREER GROWTH

within the collaboration Academia

EXCESSIVE WORKLOAD

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WORKING CONDITIONS

JOBINSECURITY

TOO MANY TASKS/MEETINGS

LACKOF TRANSPARENCY





CONCLUSION THE GOAL: EVERY EARLY CAREER SCIENTIST HAS EQUAL OPPORTUNITIES INDEPENDENT OF THEIR BACKGROUND

- Large collaborations present excellent opportunities to engage with like-minded individuals in unravelling the mysteries of the universe.
- Diversity and fresh ideas are fundamental drivers of our success. Supporting early
 career scientists in their development and maintaining their initial motivation and wellbeing necessitates re-evaluating some of the ways we collaborate.
- Early career scientists shape the future of our field, so let's take good care of them!

