



*Citation for published version:*

Lunt, AJG & Roussi, A, Research Europe Interview - My winning proposal: CERN's early-career accelerator, 2017, Web publication/site.

*Publication date:*  
2017

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication](#)

## University of Bath

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/316620838>


## Research Europe Interview – My winning proposal: CERN's early-career accelerator

Research · May 2017

CITATIONS  
0

READS  
86

1 author:

 Alexander Lunt  
University of Bath  
44 PUBLICATIONS 260 CITATIONS  
[SEE PROFILE](#)

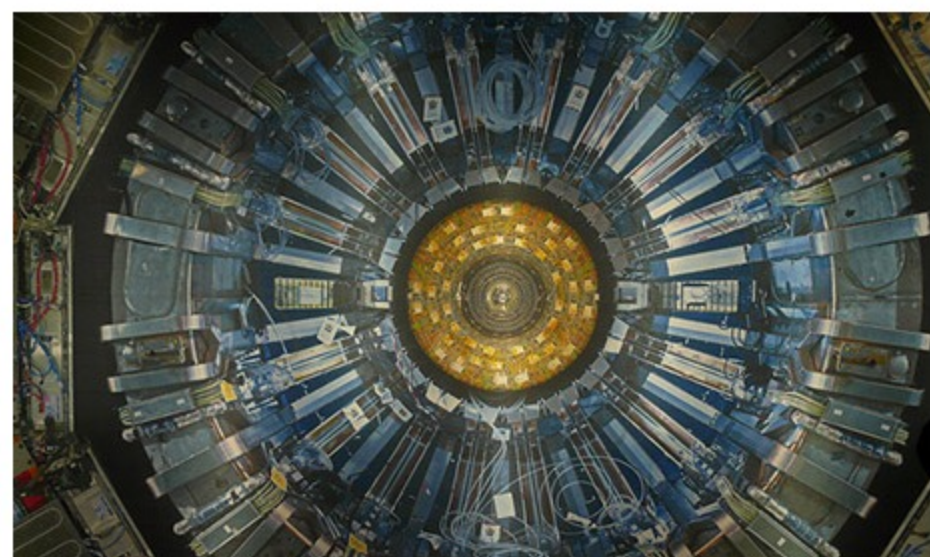
Some of the authors of this publication are also working on these related projects:

[Project](#) Residual Stress Evaluation across the Scales and Eigenstrain Modelling [View project](#)

[Project](#) Surfaces, coatings and tribology [View project](#)



Bookmark Email Download



13 Apr 17, 12:23

By **Antoaneta Roussi**

## Related Links

**Cern Senior Fellowships on Research Professional**

**Cern Junior Fellowships on Research Professional**

## Related Articles

**EU makes major loan to Cern**

**Cern researchers gain access to US labs**

[f](#) [t](#) [in](#)

## My winning proposal: Cern's early-career accelerator

**Early-career particle physicists will not need nudging to apply to Cern's fellowship scheme. But there's much more to it than just particle physics, as materials scientist and Cern senior fellow Alexander Lunt tells Antoaneta Roussi.**

[Comment on this article](#)

Cern's Fellowship Programme runs every year and takes on 220 applicants. Just sixty are in particle physics; the remainder work in disciplines including materials science, computing and engineering.

Fellowships are open to all nationals of Cern member or associate states. Both junior and senior fellowships are available and are awarded depending on the applicants' experience. All applicants in experimental or theoretical physics should have a PhD or be close to completing one. Applicants from other disciplines can apply with masters or bachelors degrees or equivalent.

The deadline for applications to the 2018 Fellowship Programme is 4 September.

### What department is your senior fellowship in?

I work at the materials science department, within the microscopy group. My role is to assist other Cern departments with material analysis needs that they have on a day-to-day basis. I work with powerful electron microscopes to help gain insight into features of interest.

### How did you first hear about opportunities at Cern?

I saw a presentation while I was still an undergraduate and learned then that Cern was deeply involved in the development of state-of-the-art materials-science systems. At that presentation I spoke to a few people from Cern to find out about the sorts of projects they were involved in.

### What was the application process for a Senior Fellowship like?

I had to supply a CV, a list of publications I'd participated in, my qualifications and three letters of recommendation. With this fellowship you're not actually applying for a specific position, so my approach—and I doubt whether doing this would be encouraged by Cern—was to be as generic in my application as I could.

### How did you do that?

I made a point of demonstrating all the skills that I'd built up and all the experiments that I'd participated in. I felt that gave me the best chance of somebody from the selection team taking an interest in my CV as it might potentially be relevant to many departments.

### Did you get any support or good advice from your former colleagues at the University of Oxford when you applied?

I received a lot of support from my PhD supervisor who let me go to Cern and present my research before I started. He also gave me an excellent reference specifically aimed at demonstrating the broad range of experimental techniques that I had worked on.

### Did anything come as a surprise when you started at Cern?

The only real surprises were associated with the benefits of the diplomatic status of Cern employees. I hadn't properly appreciated those.

### You're in a role assisting other departments, but do you still get to be involved in research projects?

Yes, I am involved with a couple of dedicated research projects in other departments at Cern. Typically these are longer studies, which overlap my expertise and the needs of a particular group.

### Will you get your name on any publications during your time as a fellow?

I recently published a first-author paper on some research that I did on a temperature mapping system and I am working on two other projects that I plan to write up as journal articles. I have been a co-author in several conference abstracts and am hopeful that this work will eventually lead to journal article co-authorship also.

### At what career stage do other fellows tend to be?

For the Senior Fellowship you need a PhD to be eligible but there is a Junior Fellowship Programme for people with undergraduate or masters degrees. Most people in the Senior Fellowship Programme have finished their PhDs recently but that's not always the case. In our group there's a senior fellow with five years' postdoc experience.

### How long do fellowships last?

Typically two years but there are some one-year fellowships available. In some cases, there is the potential to extend for a further year, but that is not guaranteed and it's depending on the requirements of the project.

### What is Cern like as a place to work?

It has a real university feel. The whole facility is spread out in the way that a university campus might be. A lot of young people are engaged in the Cern social clubs, which are focused on activities from amateur radio to yoga. The main restaurant is a real social hub as well, in the evenings there's usually a congregation of people from all over the site who discuss ideas and projects.

### What can a Cern fellowship do for your career?

For one thing, it's a good launchpad for a full-time staff position at Cern. Obviously nothing is guaranteed, but you get insider knowledge of the site and understand the job opportunities better. Every staff position is posted for people to apply externally, but Cern will know who you are and what you can do when you already work there. Of course, even for people who aren't looking to stay on, a Cern fellowship will always be a valuable experience and look good on a CV.

### Do you have any advice for this year's applicants?

First, check that Cern is interested in the field you want to pursue. There's plenty of information available online. Every group has their own website where people can find out more about the nature of their work. Sending an email to someone in a group you'd like to work in might go a long way.

When they start to look into it, some people might be surprised by the balance of staff at Cern. For example, of course particle physics is a hot topic but actually the number of particle physicists at Cern is rather small. Around 70 per cent of scientific staff are engineers, because the majority of the critical roles are in building and maintaining the experiments.

### CV: Alexander Lunt

**2016-present** Senior Fellow in materials science, Cern, Geneva, Switzerland

**2013-2016** Stipendiary lecturer in mechanical and materials engineering, Christ Church, University of Oxford, UK

**2016** DPhil in engineering science, Christ Church, University of Oxford

**2012** MEng in engineering science, Christ Church, University of Oxford

Image: Loz Pycock [CC BY-SA 2.0], via Flickr

[Comments](#)

[Sign in to add a comment](#)

**IRISH RESEARCH COUNCIL**  
An Chomhairle um Thaighde in Éirinn

The Irish Research Council is delighted to announce that the call for the Irish Research Council Laureate Awards 2017/18 programme is now open for applications.

The Council is inviting applications at the early and mid-career level (Starting and Consolidator).

Funding will be awarded on the basis of excellence, assessed through an international peer-review process. Awards must be held at an eligible institution in Ireland.

[Click here for further details](#)

**President of Ireland Future Research Leaders Programme**

**5 year awards of up to €1.25 million Open for Expressions of Interest.**

The programme is designed to attract new and emerging research leaders in scientific and engineering domains, where candidates may have both academic and/or industry relevant backgrounds with a focus on research excellence with impact.

**Applicants must have:**

- 3-15 years post-PhD or equivalent
- Demonstrated research excellence, independence, maturity and leadership, by having several important publications without PhD supervisor
- Secured independent research funding
- Accumulated supervisory experience.

**Deadline: 05/05/2017**