

# **IOP** | Institute of Physics **Women in Physics Group**

**Newsletter 20**  
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News from the Chair

## WIPG Contacts

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### **Chair**

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# Linking Universities in UK and Brazil

In August 2015 I had the opportunity to visit two universities in Brazil as part of a Santander Mobility Scholarship to compare and contrast attitudes and approaches to gender balance and innovation in Physics between Queen's University Belfast, UK and the two universities in Brazil. I visited UNICAMP (Campinas, Sao Paulo) and University Federal de Santa Catarina (UFSC, Florianopolis, Santa Catarina).

I attended a focus group in UNICAMP, which involves students engaged in student chapters, junior companies or Student representation. We discussed the topics at great length. I asked male and females from UFSC, UNICAMP and Queen's University Belfast to complete a short survey. I received almost 200 responses from the three universities (25% female responses). The survey asked about the pros and cons of working in academia. Responses from all career stages indicated that a major positive factor of a career in academia is that the work is interesting, exciting and there is an element of control over your research. Flexible working hours were also mentioned, in addition to many travel opportunities for experiments and conferences.

I really enjoyed my time in Brazil; I had a great experience and learnt a lot about the culture and the people. This trip allowed me to meet many students and researchers who come from different backgrounds and we transferred ideas and opinions about these two very important topics; gender

balance in physics and innovation in physics. I am very grateful to have received a Santander Mobility Scholarship to allow me to complete this project.

**Clare Scullion,**  
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Click <https://goo.gl/KouIMQ>  
for full report.



# Women in Physics Conference at the City of London School for Girls

1<sup>st</sup> March 2016

Women in Physics

- Elinor Bailey  
LIGHT
- Dr Joanna Brunker  
& Daniel Portelli  
MEDICAL PHYSICS
- Professor Mairi Sakellariadou  
THEORETICAL PHYSICS &  
COSMOLOGY

CLSG  
MAIN HALL  
5.00pm - 6.30pm  
1<sup>st</sup> March 2016  
Refreshments Provided

*"We found organising this event an extremely rewarding experience (and hopefully those who attended also felt this way!) and I hope it showed those who came (boys and girls alike) just how varied and fascinating physics really is, and what interesting careers the study of physics can lead to, regardless of gender."*

Attending an all girls school, my friends and I have always been very lucky in that no subjects were seen as off-limits simply because they were male dominated – in a year of just under ninety pupils, twenty of us take A2-Level Physics and numerous girls are hoping to pursue further studies in STEM subjects. However it still remains an unavoidable fact that women are far less likely to go into STEM-related careers, physics and engineering in particular, than men. Whilst discussing this issue, my friend Annabel and I noticed that although we have had numerous talks at school about engineering, there had been little opportunity to meet real-life, female physicists, and we felt that this would really help to encourage girls to continue studying the subject, especially as there is such little representation of women in physics in mainstream media. So we decided to hold a Women in Physics conference at our school, an opportunity for pupils at our school and from other schools around London to hear about the amazing work in which some female physicists have been involved, in the hope of encouraging younger pupils to continue their study of physics.

We decided that we wanted to have three fairly accessible talks about a range of specialist areas of physics, to ensure that the event would appeal not only to those studying physics, but also to those who may not yet have extensive knowledge of the subject, but who find it interesting. We also wanted our speakers to address the current lack of women in the subject, and perhaps why they think this persists and what we can do to help make a change. We contacted the Institute of Physics and we were able to confirm three talks for the event: Elinor Bailey, who teaches at UCL, to speak about light and luminescence, Mairi Sakellariadou, a professor in theoretical physics at King's College, speaking about cosmology and theoretical physics, and Joanna Brunker, a research physicist at Cambridge, to speak about her work in medical physics alongside Daniel Portelli, a PhD student of mathematical modelling.

The event was attended by around 80 pupils between the ages of 15 and 18 as well as their teachers from numerous schools around London, and it was a success! All three talks were extremely interesting and quite different. Elinor Bailey brought some equipment with her and showed us some of the things you can do with UV light, as well as incorporating some chemistry with physics to explain luminescence and phosphorescence; Mairi Sakellariadou spoke about her career path and some of the extremely fascinating work that is going into exploring our universe and the way it works, and Joanna Brunker and Daniel Portelli explained some of the ways that physics can be applied to medical science, and the different routes available for pupils interested in physics. There was sufficient time at the end of each talk for the audience to ask questions, and I think this was extremely beneficial for those students considering further study or careers in physics.

## WIPG Committee

### Chair

Dr Heather Williams  
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*Central Manchester Health  
Authority*

### Secretary & Treasurer

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*Brunel, Engineering*

### Ordinary Members

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*Burgess Hill School for Girls,  
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Miss Karla-Luise Herpoldt  
AMInstP  
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MInstP  
*Senior Lecturer, Brunel  
University*

Professor Averil Macdonald  
CPhys FInstP  
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Miss Amy Preece MInstP  
*Bluecoat CofE, Coventry*

Mrs Kathleen Stevenson  
CPhys MInstP  
*Cavendish Nuclear Ltd*

Dr Francisca Wheeler CPhys  
FInstP

### Co-Opted

Mrs Ann Marks MBE CPhys  
FInstP

# Goodbye to Eithne

*As Eithne leaves the Women in Physics Group committee she provides an update on what she's been doing.*

Before her role as Professor in the School of Physics and Fellow at Trinity College Dublin, Eithne was formerly Fellow and member of Governing Body at Magdalen College, Oxford and Postdoctoral Member of Technical Staff, AT&T Bell Laboratories, Crawford Hill Laboratory, New Jersey, USA.

During Eithne's time serving on the WiPG committee, she was appointed to the Board of the Irish Research Council by Ministerial appointment. She led successful gender equality awards during this period, Institute of Physics Juno and Athena SWAN in the first round of Athena SWAN applications following its launch in Ireland in 2015. She serves on the Executive of Women in Technology and Science (WITS) which celebrates its 25th anniversary in November 2015. She has led Trinity Women in Physics and initiated Irish national Women in Physics meetings and networking as well as gathering and sharing national gender disaggregated data for Physics. She has also represented Juno internationally; giving a talk in Brussels at the kick-off meeting of GENERA, a new EU-funded project with a predominantly European focus encouraging research institutes and other physics organisations across the EU to develop gender equality plans (<https://indico.nikhef.nl/conferenceDisplay.py?ovw=True&confId=175>). She initiated a "Focus on Women in Light" event in Dublin as part of the UNESCO International Year of Light events with kind support from the IOP Women in Physics Group.

Eithne has served Trinity and the wider national and international community on numerous scientific and service to the community committees including Finance, Personnel and Appointments, Equality, EU INTEGER and Personnel and Appointments. She feels she has been extremely fortunate to have worked with such enthusiastic colleagues on the Women in Physics Group.

**Professor Eithne McCabe**  
**M.A.(Oxon), D.Phil.(Oxon), B.E.(NUI), FTCD, FInstP**