

Particle physicist at DESY

Birthday April 11, 1979
Born in Braunschweig, Germany
Nationality German

Education

- 10/2006-11/2010 **Doctorate (DPhil)**, Oxford University, Great Britain, “*The W Charge Asymmetry: Measurement of the Proton Structure with the ATLAS Detector*” under supervision of Çiğdem İşsever
- 10/2000-06/2006 **Diploma in Physics**, Universität Dortmund, H1 Collaboration, “*Optimisation of the selection capability of the H1 Fast Track trigger*” under supervision of Dietrich Wegener.
- 10/1998-06/2005 **Diploma in Journalism**, Universität Dortmund, “*Keinesfalls trivial, aber doch lösbar: Zum Problem der Popularisierung von Mathematik anhand einer Untersuchung des Mathematikers in Gießen*” under supervision of Udo Branahl.

Current Positions

02/2017-now **Lecturer**, University of Sheffield, Sheffield, United Kingdom.

Previous Positions

- 02/2014-01/2017 **Research assistant**, Deutsches Elektron Synchrotron, Zeuthen, Germany.
- 11/2009-01/2014 **Research assistant**, Albert-Ludwigs-Universität Freiburg, Germany.

Fellowships

- 01/2015-12/2015 **Programme des Projektbezogenen Personenaustauschs (PPP)**, DAAD, Travel to University of Pennsylvania to work on Electron Performance.
- 02/2015 **FRIAS Nachwuchstagung**, Freiburg Institute for Advanced Studies, Workshop.
- 10/2008-09/2009 **DAAD Scholarship**, DAAD, Full PhD Scholarship.
- 10/2006-09/2008 **Michael Foster Memorial Scholarship**, Oxford University, Full PhD Scholarship.

Supervision of students

I have been acting supervisor for a number of students and have also defined their thesis topics in agreement with the respective professors. These are the ones listed below.

- **4 PhD students** – I am currently supervising two PhD theses connected with *WW* production (targeting the 13 TeV measurement). One student (associated with the University of Freiburg) has submitted his thesis and is due to defend on November 22nd, another one has defended.
- **6 masters students** – I have successfully supervised six masters theses, four of which have been completed successfully so far. One of my supervised masters students received the Gustav-Mie-Preis of the University of Freiburg for the best thesis in 2012.
- **1 Bachelor and 5 Summer students** – I have been solely responsible for one Bachelor and five summer student projects, three on the diboson production and two related to electron performance.

Teaching activities

- 2015/2016 **Lecture for summer students at DESY**, *Introduction to the Standard Model*.
- 2015 **Teaching assistant for Detectorphysics**, *Tutor, lecture substitute*.
- 09/2014 **46. Herbstschule für Hochenergiephysik 2014**, *Tutor*.
- 2011-2012 **Teaching assistant for Exp. Physics I**, *Organizing tutorials and exams*.

Organization of scientific meetings

- MBI **Multiboson Interactions 2015**, *Local programme committee.*
FRIAS **From silicon sensors to full detector systems 2015**, *Main Co-organizer.*
SM@LHC **SM@LHC Conference 2013**, *Local programme committee.*
ATLAS-D **ATLAS-D workshop, Wuppertal/Würzburg, 2012/2013**, *Programme committee.*
Helmholtz-Allianz **Annual meetings, Hamburg/Karlsruhe, 2012/2013**, *Programme committee.*

Leadership positions and responsibilities

- 2016-2017 **ATLAS-Convenor of the Electroweak Working group**, *Coordination of electroweak SM measurements (with more than 60 working members).*
2015-2016 **ATLAS-Convenor of the Parton Distribution Functions Forum**, *Coordination of analyses related and affected by PDFs (with more than 30 working members).*
2012-2015 **ATLAS-Convenor for electron efficiency measurements**, *Coordination of efforts to determine and improve electron identification (~30 working members).*
2012-2015 **MET Monitoring Coordinator**, *Algorithm maintenance, shift coordination.*
2012-2014 **Standard Model Convenor for ATLAS-D**, *Coordination of German SM groups.*

Major Collaborations

- 2012-now **HERAFitter Collaboration.**
2006-now **ATLAS Collaboration.**
2013-now **Proton Structure Analyses in Hadronic Collisions (PROSA).**

Scientific Journal Reviews and Internal Review Boards

- IOP **Journal of Physics G: Nuclear and Particle Physics.**
ATLAS **Member of internal editorial review boards for various analyses.**

Invited Talks and Presentations

- 09/2016 **Results on VBF, Diboson Production and aTGCs**, *Multiboson Workshop, Madison, Wisconsin, USA, (Invited speaker).*
06/2015 **The WW puzzle: Measurement of diboson production at the LHC**, *Physics Seminar, University of Pennsylvania, (Invited speaker).*
09/2014 **Upgrades of ATLAS inner detector for HL-LHC (strips)**, *23rd International Workshop on Vertex Detectors, Doksy, Czech Republic, (on behalf of the ATLAS collaboration).*
07/2014 **Measurement of WW production with the ATLAS detector at $\sqrt{s} = 8$ TeV**, *37th International Conference on High Energy Physics (ICHEP), Valencia, Spain, (on behalf of the ATLAS collaboration).*
03/2012 **Neues vom Standardmodell: Elektroschwache Präzisionsmessungen an LHC und TeVatron**, *Frühjahrskonferenz der Deutschen Physikalischen Gesellschaft (DPG), Göttingen, (Invited speaker).*
07/2010 **Production of W and Z Bosons with the ATLAS detector at $\sqrt{s}=7$ TeV**, *Rencontres de Blois, Blois, France, (on behalf of the ATLAS collaboration).*

Outreach

- 2010-now **Science Communicator**, *Netzwerk Teilchenphysik, Germany, Member/Local coordinator, particle physics master classes in schools and at workshops for teachers.*
10/2008-now **IOP International co-ordinator**, *IOP for Africa, Nkatha Bay, Malawi, Organization and leading of teacher training workshops to improve science teaching in Malawi.*