

Åsmund Folkestad

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EDUCATION

From fall 2018	PhD Student in Physics, MIT First year fellow at the Center of Theoretical Physics.
2012 – 2018	MSc in Applied Physics and Mathematics, NTNU Combined undergrad and master's program. GPA: 4.87/5.00. Thesis: <i>Effective Polyakov Loop Modeling of QCD</i> . Supervisor: Professor Jens O. Andersen.
2016 – 2017	Exchange Student, University of Minnesota Exchange student doing graduate school coursework in theoretical physics. GPA: 4.00/4.00.
July 2016	Summer School in Physics, Petnica Summer Institute Nine day summer school on general relativity in Serbia.

SCHOLARSHIPS AND AWARDS

From fall 2018	Aker Scholarship Scholarship funding for PhD studies to a selected list of top universities.
2018	Best Technology Student at Faculty of Natural Sciences Award for the best MSc student among the 181 graduating in technology programs at the NTNU Faculty of Natural Sciences.
Spring 2017	Educational Scholarship from Toten Sparebank Scholarship awarded to two young students by the bank Toten Sparebank.
2016 – 2017	Fulbright Scholarship Fulbright Scholarship for studying in the US the 2016/2017 academic year.
2016 – 2017	Graduate Scholarship from University of Minnesota Scholarship from University of Minnesota covering tuition fees for an academic year in addition to a subsistence stipend.
2016 – 2017	Exchange Study Stipend from NTNU Stipend from NTNU covering some expenses related to exchange studies.

RESEARCH AND WORK EXPERIENCE

June 2017 – Aug. 2017	Cooperation Associate, CERN Work tasks: perform research on radiation damage in the Vertex Locator at LHCb.
July 2015 – June 2016	Technical Student, CERN Work tasks: perform simulations of silicon detectors for the LHCb experiment. Research and develop a silicon radiation damage model. Carry out experimental tests of silicon sensor prototypes.

TEACHING EXPERIENCE

Aug. 2014 – Dec. 2014	Head Teaching Assistant, NTNU Head TA in TMA4120 Calculus 4K, a course on complex, Laplace and Fourier analysis with 400 students. Work tasks: coordinate 12 TAs, create a course webpage and write solutions to exercises and exam in \LaTeX .
2013 – 2015 2017 – 2018	Teaching Assistant, NTNU Exercise instructor in the following courses <ul style="list-style-type: none">TFY4345 Classical Mechanics (analytical mechanics at the level of Goldstein)TFY4215 Introduction to Quantum Physics (twice, approx. level of Griffiths)MA0002 Mathematical Methods B (linear algebra and multivariate calculus)TDT4105 Information Technology (MATLAB programming)

Summer 2013,
2014

Teacher, Gjøvik University College

Lecturing and exercise instruction in a summer course in algebra and basic calculus for 180 future engineering students. Work tasks: independently create and hold lectures, create and correct tests.

PUBLICATIONS

- Å. Folkestad et al. Development of a silicon bulk radiation damage model for Sentaurus TCAD. *Nuclear Inst. and Methods in Physics Research A*, Volume 874:94–102, December 2017. <http://www.sciencedirect.com/science/article/pii/S0168900217309282>
- K. Akiba, Å. Folkestad, P. Collins. TCAD simulation of Radiation Damage Effects on LHCb Velo and Operations in Run-II. Poster at the *11th International "Hiroshima" Symposium on the Development and Application of Semiconductor Tracking Detectors*. <https://indico.cern.ch/event/577879/contributions/2740131/>

PUBLIC TALKS

2016

11th "Trento" Workshop on Advanced Silicon Radiation Detectors

Presented the status of the VELO detector upgrade project on behalf of LHCb, including my research.

<https://indico.cern.ch/event/452766/contributions/1117380/>

PROGRAMMING EXPERIENCE

Programming languages: C++, Python.

Open source experience: Contributor to the detector simulation program [Garfield++](#).

LANGUAGES

Norwegian: Mother tongue.

English: Fluent (TOEFL: 129/130).