# Miroslav Šimko

Nuclear Physics Institute Czech Academy of Sciences Na Truhlářce 39/64 180 00 Praha 8, Czech Republic

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### Education

2013-present, Ph.D., Experimental Nuclear and Particle Physics

Czech Technical University

Faculty of Nuclear Sciences and Physical Engineering

Thesis topic: Study of Heavy Flavor at the STAR Experiment

2011–2013, M.Sc., Experimental Nuclear and Particle Physics

Czech Technical University

Faculty of Nuclear Sciences and Physical Engineering

**Thesis:** Design and Optimalization of the Optical Readout System for Electromagnetic Calorimeter FOCAL for the ALICE Experiment

2008–2011, B.Sc., Experimental Nuclear and Particle Physics

Czech Technical University

Faculty of Nuclear Sciences and Physical Engineering

Thesis: Detector Control System for the ALICE Experiment

## Research and Experience

**2014**—present: Analysis: Reconstruction of the  $\Lambda_c$  baryon at the STAR

experiment

2015-present: STAR ZDC on-call expert

2013–2014: Lawrence Berkeley National Laboratory: Simulations for

the Pixel sensors of the HFT at the STAR experiment

**2012–2013**: Development of the Prague prototype (scintillator version) of the electromagnetic forward calorimeter FoCal for ALICE, CERN

2011–2013: Detector Control System expert for the Silicon Drift

Detector for the ALICE experiment, CERN

### Teaching

Czech Technical University

Faculty of Nuclear Sciences and Physical Engineering

Student Physics Laboratory Practice, 2014-present

# Languages and Skills

Czech/Slovak (native), English (fluent), French (intermediate), Japanese

(intermediate)

Programming in C, C++, Root, Matlab, Mathematica, BASH, PVSS,

National Instruments LabView

Driver's license B

### Outreach

Member of the Executive board and active member of the Prague Section of EPS Young Minds

Organization of several activities and grant aplications, photography, 2016–present

Main organizer of CERN Masterclasses at the Czech Technical

University, 2014–2016 and an active organizer to present

### Interests

Physics, informatics, photography, hiking, sport (bicycle, ski, canoeing), literature

### Conferences

**Quark Matter 2018, Venice, Italy** May 13–19, 2018

Poster: Measurement of  $\overline{\Lambda}_c^-/\Lambda_c^+$  ratio in Au+Au collisions at  $\sqrt{s_{\rm NN}} = 200 \, {\rm GeV}$  with the STAR experiment

3-Kings Conference 2018, Košice, Slovakia Jan 5, 2018

Talk: Measurement of open charm in relativistic-heavy-ion collisions

 $19 \mathrm{th}$  Conference of Czech and Slovak Physicists, Prešov, Slovakia

Sep 4-7, 2017

Talk: Measurement of the  $\Lambda_{\rm c}$  baryon at  $\sqrt{s_{\rm NN}}=200\,{\rm GeV}$  with the STAR experiment

EPS Conference on High Energy Physics, Venice, Italy Jul 5–12, 2017 Talk: Measurements of open charm hadron production in Au+Au collisions by

the STAR experiment

Hot Quarks, South Padre Island, Texas, USA Sep 12-17, 2016

Talk: Measurements of open charm hadrons at the STAR experiment

Quark Matter 2015, Kobe, Japan Sep 27-Oct 3, 2015

Poster:  $\Lambda_c$  baryon production at  $\sqrt{s_{\rm NN}} = 200 \, {\rm GeV}$ 

ICPAQGP2015, Kolkata, India Feb 2–6, 2015

Talk: Heavy Flavor Tracker at the STAR Experiment

18th Conference of Czech and Slovak Physicists, Olomouc, Czech

**Republic** Sep 16–19 2014

Talk: Simulations for the HFT-Pixel detector at the STAR experiment

Workshop VERTEX2014, Mácha Lake, Czech Republic Sep 15–19, 2014

Poster: Simulations for the HFT–Pixel detector at the STAR experiment

### References

Jaroslav Bielčík (Current supervisor)

Faculty of Nuclear Sciences and Physical Engineering

Czech Technical University in Prague

jaroslav.bielcik@fjfi.cvut.cz

Vojtěch Petráček (Former supervisor)

Czech Technical University in Prague

University Director

vojtech.petracek@fjfi.cvut.cz

Zhangbu Xu (Work on STAR ZDC)

Brookhaven National Laboratory

STAR Spokesperson

xzb@bnl.gov

Xin Dong (Supervisor at LBNL) Lawrence Berkeley National

Laboratory

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