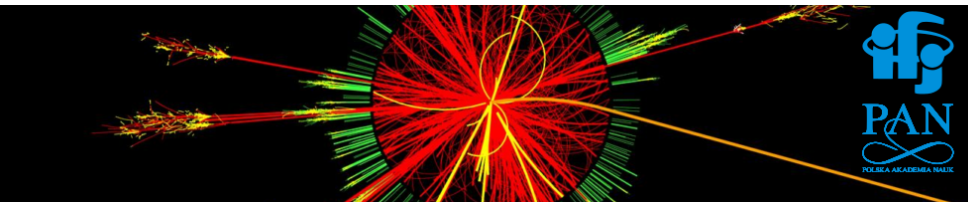


Particle Physics Summer Student Programme

Project Selection

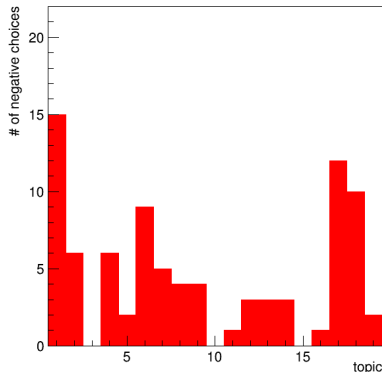
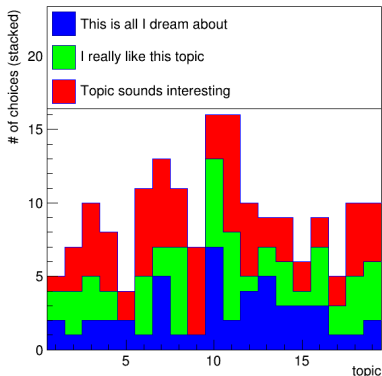
Maciej Trzebiński



Institute of Nuclear Physics Polish Academy of Sciences

8th July 2020

IFJ PAN PPSS Programme – Project Selection



- Number of people assigned to topic with the highest self-declared weight¹: 28
- Number of people assigned to topic with 2nd highest self-declared weight: 4
- Number of people assigned to topic with 3rd highest self-declared weight: 6
- Number of people assigned to topic other than selected²: 0
- Number of people assigned to negative selection: 0

¹Not necessarily 'This is all I dream about' since in some cases the highest weight was simply 'Topic sounds interesting'.

²Excluding negative selections, but containing cases when no selection was done.

- 1 A preprocessing of data from the gamma radiation detector**
Supervisor: dr inż. Piotr Kapusta, Department of Leptonic Interactions (NZ11), Piotr.Kapusta@ifj.edu.pl
Students: [Suraj Kumar Singh](#), [Sergiusz Warga](#)
- 2 Study of semi-inclusive characteristics for $B \rightarrow D/D_s h X$ decays at Belle II**
Supervisor: dr Olga Werbycka, Department of Leptonic Interactions (NZ11), olga.verbytska@ifj.edu.pl
Students: [Nazar Semkiv](#), [Arantza Pineda Gonzalez](#)
- 3 Reconstruction of hadronic showers in ATLAS Forward Proton detectors**
Supervisor: dr Rafał Staszewski, mgr inż. Krzysztof Cieśla, The Diffractive Physics Department (NZ13), rafal.staszewski@ifj.edu.pl, krzysztof.ciesla@ifj.edu.pl
Students: [Piotr Skafa](#), [Adam Gomulka](#)
- 4 Analysis of Cluster Shapes in the ATLAS AFP Detector**
Supervisor: dr Maciej Trzebiński, The Diffractive Physics Department (NZ13), maciej.trzebinski@cern.ch
Students: [Maciej Kuta](#), [Viktoriia Lysenko](#)
- 5 Analysis of Proton Transport Through LHC**
Supervisor: dr Maciej Trzebiński, The Diffractive Physics Department (NZ13), maciej.trzebinski@cern.ch
Students: [Kacper Pryga](#), [Vladyslav Rezhov](#)
- 6 Detector Control System for AFP detector in ATLAS experiment at CERN: design of graphical user interfaces**
Supervisor: dr inż. Elżbieta Banaś, The Diffractive Physics Department (NZ13), elzbieta.banas@cern.ch
Students: [Aleksandra Baszak](#), [Joseph Cave](#)
- 7 Reconstruction of particle tracks using Deep Neural Networks**
Supervisor: dr hab. Marcin Wolter, The ATLAS Experiment Department (NZ14), marcin.wolter@ifj.edu.pl
Students: [Eyup Unlu](#), [Tymoteusz Ciesielski](#)

- 8 Charged particle production in Xe+Xe collisions**
Supervisor: dr hab. Krzysztof Woźniak, The ATLAS Experiment Department (NZ14), Krzysztof.Wozniak@ifj.edu.pl
Students: [Louis Sayer](#), [Teodora Prtenjak](#)
- 9 Detection of Cosmic-Ray Ensembles**
Supervisor: dr hab. Krzysztof Woźniak, The ATLAS Experiment Department (NZ14), Krzysztof.Wozniak@ifj.edu.pl
Students: [Filip Rękawek](#), [Alexia Mavrantoni](#)
- 10 Search for the new physics in the ATLAS detector at the LHC**
Supervisor: dr Bartłomiej Żabiński, The ATLAS Experiment Department (NZ14), zabinski@ifj.edu.pl
Students: [Dominika Pacura](#), [Marek Młynarski](#)
- 11 Bayesian Analysis of Cosmic Rays data for Earthquake Predictions**
Supervisor: dr David Alvarez, Department of Cosmic Ray Research and Neutrino Studies (NZ15), dalvarez@ifj.edu.pl
Students: [Oleksandr Skorenok](#), [Ophir Moshe Ruimi](#)
- 12 Search for lepton violation in $\tau^- \rightarrow \mu^- \mu^- \mu^+$ decays with Run2 of LHCb data**
Supervisor: dr hab. Marcin Chrząszcz, dr Jihyun Bhom, The LHCb Experiment Department (NZ17), Marcin.Chrzaszcz@ifj.edu.pl, jihyun.bhom@ifj.edu.pl
Students: [Mitanshu Thakore](#), [Vladyslav Orlov](#)
- 13 Particle production with electromagnetic heavy-ion dissociation at LHC energy**
Supervisor: dr Mariola Klusek-Gawenda, Department of Theory of Strong and Multiple-body Interactions (NZ21), Mariola.Klusek@ifj.edu.pl
Students: [Mobin Moradi](#), [Pawel Jucha](#)
- 14 Measurement of the J/Ψ production in dense and hot nuclear medium at ultra-relativistic energies with ALICE**
Supervisor: dr Jacek Biernat, Department of the Ultrarelativistic Nuclear Physics and Hadron Interactions (NZ23), jacek.biernat@cern.ch
Students: [Niko Melikidze](#), [Ami Patel](#)

- 15 **Photon reconstruction via Photon Conversion Method in the ALICE experiment at LHC**
Supervisor: dr hab. Adam Matyja, Department of the Ultrarelativistic Nuclear Physics and Hadron Interactions (NZ23), adam.tomasz.matyja@cern.ch
Students: [Mariami Chabrava](#), [Giorgi Grigolia](#)
- 16 **Particle correlations in ultrarelativistic ion collisions with ALICE at LHC**
Supervisor: dr Iwona Sputowska, Department of the Ultrarelativistic Nuclear Physics and Hadron Interactions (NZ23), iwona.sputowska@cern.ch
Students: [Natalia Lisowska](#), [Kuba Krawczyk](#)
- 17 **ROOT4KaTie**
Supervisor: dr hab. Andreas van Hameren, Department of Particle Theory (NZ42), andre.hameren@ifj.edu.pl
Students: [Iliia Elmanov](#), [Anna Elmanova](#)
- 18 **Fast computations for global analysis of parton distributions**
Supervisor: dr Aleksander Kusina, Department of Particle Theory (NZ42), aleksander.kusina@ifj.edu.pl
Students: [Swapnil Dutta](#), [Eslam Zenhom](#)
- 19 **Improving “Virtual Colliders”**
Supervisor: dr hab. Andrzej Siódmok, Department of Particle Theory (NZ42), andrzej.siodmok@cern.ch
Students: [Aakanksha Dwivedi](#), [Chaitanya Paranjape](#)

Questions?