## Oklahoma State University: Team and Interests

Flera Rizatdinova

## **OSU Team**

- Flera Rizatdinova physicist
- Steven Welch Research Electrical Engineer, leader of the OSU engineering team, designer of the ITK electrical services. In addition, he is responsible for the integration of services in the final ITk inner pixel detector
- Blake Beauchamp Research Electrical Engineer, designer of the ITK electrical services. Also, oversees all testing of services at OSU
- Vallary Bhopatkar postdoc, involved in the testing of ITk electrical services
- Several undergraduate EE students; currently, don't have any graduate students involved in the project. Did have few very good students in the past
- Erik Richards mechanical engineer at CERN, have him as an external expert on the contract

## OSU experience and interests

- Our engineering group has vast expertise in the design of electrical services, called Type-0, for the ITk pixel detector
  - Many flavors of flexes depending on the layer/endcap/type of modules
    - Different numbers of layers in flexes
    - Have readout, LV and HV powering lines
  - Challenging requirements in terms of space, number of channels to serve, mass, power consumption, signal loss, etc.
- We would be interested to contribute to the design of bus tapes for this project
- Concerns:
  - Currently, our team is heavily involved in the ITk design/preproduction. Need to talk to the team about timescale before we will finally commit.