

JAMES SHIRK

Address: Upon Request

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EDUCATION

Georgia State University

B.S. in Physics.

August 2018 - Present
Overall GPA (As of August 2020): 4.23

Druid Hills High School

High School Diploma

August 2014 - May 2018
Overall GPA: 4.25

STATEMENT

To develop my skills and knowledge, in particular those focused on performing good and rigorous research allowing me to get experience that will allow me to move into continuing research as a lifelong pursuit.

TECHNICAL STRENGTHS AND SKILLS

**Programming Languages
Software & Tools**

Scientific and Object-Oriented Python, C++, R, Java, CSS/HTML
Latex, Git, Linux Command Line, MS Office

WORK/RESEARCH EXPERIENCE

Georgia State University Nuclear Physics Group

January 2020 - Present

Research Assistant

- Work under Murad Sarsour to analyze data collected at the PHENIX detector at RHIC. Extensive use of programming to analyze the collected data and modelling the physical applications of that data was done.

Georgia State University Nuclear Physics Group

March 2019 - October 2019

Research Assistant

- Work under Xiaochun He on cosmic ray detection studies. Experience was gained working hands-on with physics detectors and equipment. Experienced performing data analysis on data collected from said detectors. Attended two research conferences to present the research performed.

CONFERENCES

Invariant Yield of the ϕ Meson in $p + p$ Collisions

Georgia State University Physics Summer Undergraduate Symposium, July 30, 2020 Atlanta, Georgia

Presented data analysis performed on data taken from the PHENIX detector. Extensive analysis was done on $p + p$ collisions, fitting data and extracting physical quantities from unprocessed data.

Constructing a Low Cost, Portable Cosmic Ray Muon and Neutron Detector

APS Division of Nuclear Physics Fall 2019, October 14-17

Washington D.C.

Presented the research done relating to cosmic ray work, particularly the design and testing of the portable cosmic ray detectors. An oral presentation was performed.

Portable Cosmic Ray Telescope Design and Construction

Inaugural International Workshop on Applications of Cosmic Ray Measurements, October 4-6, 2019 Atlanta, Georgia

Presented the research done relating to cosmic ray work, particularly the design and testing of the portable cosmic ray detectors. An oral presentation was performed.

ACADEMIC ACHIEVEMENTS AND EXTRACURRICULAR

GSU president's list Fall 2018, Spring 2019, Fall 2019.

Member of the GSU chapter of the Society of Physics Students Fall 2019 - Present.

Volunteer at Science Olympiad Spring 2020.

PERSONAL TRAITS

Highly motivated and eager to learn new things.

Problem solving capabilities, persistence

Strong in both collaborations and alone