

## **Laura Patel**

Graduate Institution: Georgia State University

**Graduate Discipline:** Nuclear Physics

Hometown: Alpharetta, GA

**Relevant SC Research:** Nuclear Physics

## **Research Interest:**

I am currently working with the PHENIX Collaboration at the Relativistic Heavy Ion Collider at Brookhaven National Laboratory. In heavy ion collisions, a new state of matter is created, the quark gluon plasma. The modification of heavy quark production in the presence of a deconfined medium provides a way to quantify this new state of matter. My research focuses on calculating the cross section and nuclear modification of open bottom mesons using correlated like-sign dimuons. These results can also be used to constrain the dimuon continuum between the J/\(\sqrt{}\) and \(\sqrt{}\) resonance peaks.

Previously, I worked on optoelectronics research studying the characterization of III-V semiconductor devices, specifically GaN/AlGaN UR/IR dual-band detectors.

## **About Me:**

I received a Bachelor of Science degree form Georgia State University (GSU) in 2007 and a Master of Science in the field of solid state physics from GSU in 2009. I am currently pursuing my PhD in nuclear physics at Georgia State University and should be graduating in 2013. In the future I hope to continue to study heavy ion collisions at one of the national laboratories.

I served on the GSU Student
Technology Fee Committee for the 2009
-2010 school year and was a member of
the GSU Collage of Arts and Science
Graduate Council for the 2010 - 2011
school year. In the past I have also served
as the President of the Physics Graduate
Student Association. I am actively
involved in community outreach activities,
including the regional Science Olympiad
for middle school students and helped
organize the Fun Physics Days summer
camp for local area high school students.

Outside of research I enjoy traveling, competing in triathlons, and spending time with friends and family.

