

Alice Elisabeth Ohlson

Graduate Institution: Yale University

Graduate Discipline: Nuclear Physics

Hometown: Falls Church, VA

Relevant SC Research: Nuclear Physics



Research Interest:

My research is in relativistic heavy ion physics, which is a field at the boundary between nuclear physics and particle physics. I work on the STAR experiment at the Relativistic Heavy Ion Collider (RHIC) which is located at Brookhaven National Laboratory.

In heavy ion collisions such as those at RHIC, the energy density is high enough that quarks and gluons are no longer confined into hadrons, instead forming a state of matter known as the quark-gluon plasma (QGP). In the early stages of heavy ion collisions, high-momentum quarks and gluons (collectively known as partons) are produced in hard scatterings. They then travel through the QGP and fragment into “jets” of hadrons. In my research I study jets in order to learn about the energy loss of partons which traverse the QGP, which gives insight into the properties of the QGP and the strong nuclear interaction.

About Me:

In addition to physics, I love linguistics and languages. I speak American Sign

Language and some French, and I minored in linguistics at MIT. I also enjoy music and puzzles, and I read voraciously.



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