

Sean Bartz

Graduate Institution: University of Minnesota-Twin Cities

Graduate Discipline: Nuclear Theory and Particle Phenomenology

Hometown: Indianapolis, IN

Relevant SC Research: Nuclear Physics



Research Interest:

I am interested in gauge/gravity dualities and their applications to quantum chromodynamics. I have worked on fitting an AdS/QCD model to the excited states of light mesons. I am currently working to derive the background fields of the model from a scalar field, which will make the model more self-consistent. Once I have developed such a potential, I will examine the thermal properties of the theory, including the phase transition to a deconfined phase approximating the quark-gluon plasma, found in heavy ion collisions.

About Me:

I am entering my fifth year of graduate studies in physics at the University of Minnesota. After graduate school, I hope to remain in academia, whether at a large university or a liberal arts school. Participation in the SCGF program has

also opened my eyes to the possibilities in our national labs. I am interested in improving both undergraduate and graduate physics education and have served as a student representative to my department's graduate studies committee.

I am interested in transportation policy and the designing and planning of more efficient transportation modes and networks. I am interested in the application of physics techniques to these and other problems that have not been traditionally associated with such analysis.

I love to play and watch sports, especially basketball. I enjoy the outdoors by biking and kayaking.



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