



Physics Department Colloquium

Dr. Clayton E. Myers

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Title: Bringing the Cosmos Down to Earth: Studying Astrophysical Processes in Laboratory Experiments

Abstract: Astrophysical processes have long been studied by combining remote observations with theory and modeling. While many astrophysical processes are now well understood, many more remain unresolved. In this talk, I will describe a relatively new approach to studying key astrophysical phenomena; that of *laboratory plasma astrophysics*. Here, the goal is to design experiments that allow us to study astrophysical phenomena in a well-controlled laboratory setting. The challenge is to scale down the enormous plasmas of stars and galaxies without changing the physics along the way. With this in mind, I will describe laboratory experiments that are designed to study solar eruptions, magnetic reconnection, and the dynamo effect. Particular emphasis will be placed on an experiment at Princeton that is changing how we view the triggering and initiation of solar eruptions.

Date: Tuesday, November 3, 2015

Time: 12:30 PM

Where: Science Complex – P-317

