**Physics Seminar**

**James Ritman**

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*“The PANDA Experiment a facility to map out exotic and charmed hadrons”*

**Abstract**

The PANDA experiment is currently being constructed to measure antiproton annihilation reactions at the international FAIR facility. The intense, phase space cooled antiproton beam with momentum between 1.5 and 15 GeV/c will enable high precision spectroscopic studies of a wide range of final
states in the charm quark mass region. In particular the use of an antiproton beam enhances the access to states of high L and enable mass/width resolutions of about 50 keV for certain states, which can enable decisive conclusions on the nature of some states. Furthermore, the comparison of formation and production reactions help to pinpoint states with quantum numbers that can not be explained by a valence quark-antiquark pair. In many aspects this program is complementary to the Jlab 12 GeV projects that are soon going into operation. This talk will present an overview of the

physics program of PANDA and a summary of the status to construct PANDA..

**Friday, April 25, 2014**

**11:00 am**

**CEBAF Auditorium**