NDSU Physics Seminar

" Unveiling Dark Energy - An Accelerating Universe"

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Wednesday, December 2nd at 4:00 p.m.

South Engineering 221, NDSU (refreshments at 3:45 p.m. in room 216)

In 1998, two independent teams of astronomers announced that the Universe was in a period of accelerated expansion. This unexpected discovery signifies either a breakdown in our understanding of gravity on large scales or the existence of an "anti-gravitational" force (dark energy) that permeates the Universe.

Due to the potential paradigm shift in our understanding of physics at a fundamental level, major funding sources (i.e., NASA, DOE, and NSF) have expressed interest in supporting research initiatives that seek to uncover the nature of dark energy. One of these projects, the Dark Energy Survey (DES), will observe 5000 square degrees of the southern hemisphere using a new wide-field imaging camera mounted on a 4-meter telescope in Chile. The DES will allow astronomers to characterize dark energy with high precision and provide important observational constraints on its nature. As a member of the DES, I will describe how this project will help to shed light on dark energy.

All are welcome!