

Physics Colloquium

Supernovae and the Accelerating Universe

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Since 1998 when we discovered that the local universe was in acceleration, the existence of a type of "dark energy" has been verified by a number of other observations including both distance measurements and the linear growth of structure at the largest scales in the Universe. The intrinsic luminosity of thermonuclear explosions of white dwarfs (Type Ia supernovae) still are the most accurate way to measure the local acceleration and the equation of state of dark energy. I will review the latest results in the physics of the explosion of a Type Ia, the value of the equation of state parameter, and future experiments to help us understand the nature of this mysterious energy.

**Thursday, September 24, 3:30pm,
SCI 234**

Refreshments will be served in Sci 103 at 3:00pm