Our universe is accelerating and we don’t know why. Together, ordinary matter and ordinary gravity are unable to account for this phenomenon. The simplest explanation invokes “dark energy,” a smooth and persistent component of the universe’s energy budget, which could be a cosmological constant or a slowly varying field. Alternatively, Einstein’s theory of general relativity could be breaking down on cosmological scales. I will discuss the basic evidence for the accelerating universe, some of the theoretical proposals that have been put forward to account for it, and future observational tests that will help us distinguish between the possibilities.

Refreshments to follow in room 2-222
Leonard Lounge, Knudsen Hall