

# Physics Department Seminar

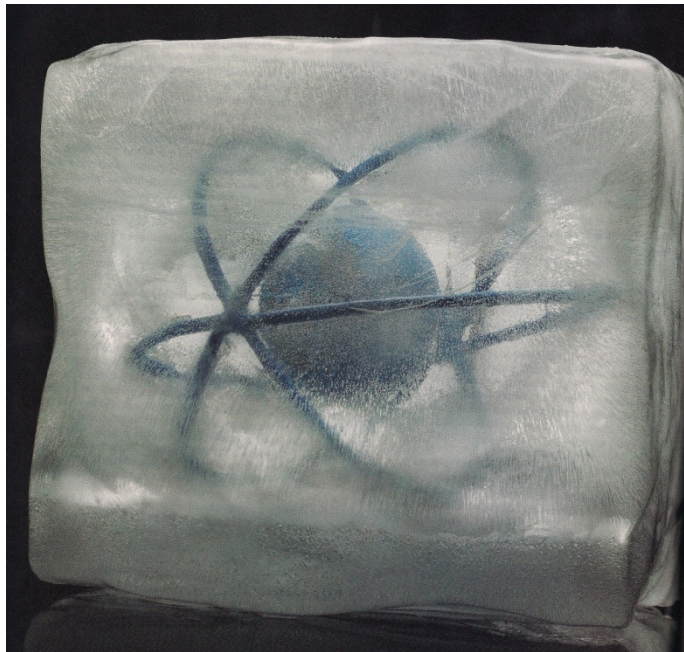
Friday May 18th, 2012

1:00 pm in PhSc 105 (*note time change*)

## Taking Ever Tinier Steps Toward Zero Kelvin.

Mr. Joseph Steinberg

Senior Physics Major, CSUC



**Abstract:** In this seminar I will explore the history of the reduction of temperature. With each novel method of temperature reduction, we find that physicists have capitalized on the fundamentals of thermodynamics in order to reach ever lower temperatures. Starting with Joule-Thompson expansion, and ending with an experimental design involving Maxwell's Demon, we survey the physics behind the methods that produce temperatures as low as 0.1 nK.