SEMINAR IN PHYSICS

Friday, April 8, 2016
3:30-4:25 – Ross 0220

~ Refreshments! ~

The Leidenfrost Effect

Taylor Chew, UNC Physics Student

The Leidenfrost Effect can be observed when cooking with a hot pan. If the surface of the pan is hot the water will boil away, but at a temperature near the Leidenfrost point the water will remain a droplet skittering around the scorching pan like a greased up pig. The droplet is suspended on top of a cloud of vapor produced by the hot surface. A similar reaction can be observed with very cold liquids (oxygen, nitrogen) on relatively hot table top surfaces. It's been over 200 years since Johann Leidenfrost documented his thoughts on this hot topic, but there has been little progress made to further utilize this phenomenon.

Matters of Dark Matter

Ryan Fabian, UNC Physics Student

The suggested presence of dark matter changed our views of the universe as we learned that 96% of our universe is missing. The presence of dark matter implies that only 4% of the universe is comprised of matter that we are familiar with. Through this discussion, I wish to discuss how our knowledge of matter has evolved over time, how astronomers determined the presence of dark matter, what dark matter isn't, and how future researchers are attempting to discover the particle or particles that make up dark matter.