SEMINAR IN PHYSICS

Friday, March 3, 2017 3:30-4:25 – Ross 0220

~ Refreshments! ~

Pressure at Extreme Ocean Depths

Tyler DeVerse UNC Physics Major

This will be a presentation discussing the challenges and technology behind exploring the deep ocean depths, focusing on the challenges presented by the extreme pressure at such depths.

There have only been three people and two missions to ever successfully make it to the bottom of the known ocean, The Challenger Deep. The technology behind the most recent adventure in 2012 is quite remarkable. Today we mostly use robotic subs for our ocean exploration due to the multitude of challenges one must overcome to send a human to such extreme depths, as well as the fact that there are not any benefits of having a person in the sub.

Dusty Plasmas and Their Application

William Mendoza UNC Physics Major

This seminar will overview dusty plasmas and their applications. These plasmas are abundant in space as well as here on Earth, which can be beneficial for our environment yet burdensome in the lab.

The use of plasmas in the atmosphere involves the formation of dusty plasmas which destroy air pollutants. In astronomy, dusty plasmas can give insight into planetary dynamics as well as ring formation. Other topics will include the efficiency of plasmas in technologies and future research.