## PHYSICS AND ASTRONOMY SEMINAR

## Dr. Nathan Secrest

Naval Research Laboratory

## "Supermassive Black Holes in Unexpected Places"

## **Abstract**

Over the last few decades, we have come to understand that supermassive black holes, black holes millions to billions of times as massive as our sun, reside at the centers of nearly all large galaxies. By an unknown process, these enormous black holes took root when the universe was extremely young, and have played an integral role in the evolution of their host galaxies over cosmic time. But in the last few years, supermassive black holes have been spotted in very small galaxies and other systems that are not expected to host them, possibly yielding clues into their origins. In this talk, I will discuss my contributions to this nascent field, as well as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65) at the data as future directions that may help shed light on the origins of henk roo (65).