

## PHYSICS AND ASTRONOMY COLLOQUIUM

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## Black Holes: GW150914 and the First Advanced LIGO Observations

## **Abstract**

On September 14, 2015 at 09:50:45 UTC, the two LIGO Observatories made the first-ever direct detection of gravitational waves at the Earth and the first-ever observation of two black holes merging into one. I will discuss black holes, and go into some of the weird and fascinating properties of space and time in and around them. I will also discuss how GW150914 allows the first-ever test of