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## **Simeon Bird (UC Riverside): Did LIGO Detect Dark Matter?**

*Thursday, 22 February 2018 08:10 (20 minutes)*

I will discuss the possibility that the black-hole binary detected by LIGO may be a signature of primordial black hole dark matter. If two BHs in a galactic halo pass sufficiently close, they radiate enough energy in gravitational waves to become gravitationally bound. Curiously, the expected merger rate from these objects overlaps with that predicted by LIGO. Although a PBH dark matter fraction of unity is now ruled out, a smaller fraction is still plausible.

**Presenter:** BIRD, Simeon (UC Riverside)

**Session Classification:** Session 5