Short Period Binary White Dwarfs:
Gravitational Waves, Merger Rates, and Likely Outcomes
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Host: Geoff Clayton 3:30 PM Thursday, November 16, 2017 109 Nicholson Hall
Refreshments served at 3:10 PM in 232 (Library) Nicholson Hall
The identity of Type Ia Supernovae (SNe) Progenitors is one of the key open questions in astrophysics. Merger of binary white dwarf stars are one of the proposed channels of the formation of SNe Ia. We have performed a targeted survey to find merging white dwarf systems, and we have increased the number of known merger systems by a factor of seven. Our sample includes systems with orbital periods as short as 12 minutes, and gravitational wave sources in the mHz frequency range. I will discuss the characteristics of this sample, their merger rate, and likely outcomes from these mergers.
"Hunting microbes upon the coastal sea" By Cameron Thrash

