

## UPDATE ON AM CVN STARS

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AM CVn stars are the final outcome of a fine tuned binary star evolution. They are hydrogen deficient and have orbital periods less than 65 minutes, which make them possible detectable sources for Gravitational Wave (GW) radiation. Mass is transferred between a low mass star with a variable degree of degeneracy to a heavier white dwarf. The Sloan Digital Sky Survey and other surveys have increased the number of such binaries to 25, including 3 with orbital periods of less than 10 minutes. For these, four different models have been proposed, including one without mass transfer, driven by electricity generated by the secondary star moving in the magnetic field of the primary. AM CVn stars are also possible progenitors of SN Ia or weaker explosive events. There are at present three birth channels for AM CVn stars: Either a low mass white dwarf donor, a low mass helium star, or a strongly evolved hydrogen CV. In my talk I will discuss observational constraints that may give us possibilities to determine birth channels for AM CVn stars based on mass-radius relations.