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**Radiating Macroscopic Dark Matter and  
Phenomenology**

Friday, 9 August 2019, 11:30

Room A304

Dark matter constitutes about  $5/6$ th of the matter in the universe, but its nature and interactions remain one of the great puzzles of fundamental physics. Despite extensive experimental efforts, there have been no hints of WIMPS, Axions or any physics Beyond the Standard Model (BSM). The question then arises: Could the Standard Model, the most accurate and extremely well-tested theory of all observed particles in nature, explain dark matter as well? Many models of exotic quark matter have been proposed, each sharing similarities that they are of nuclear density and macroscopic size, resulting in the term Macroscopic dark matter or “macros”. Since neutron stars are known to have similar properties, using them as a toy model, we study the effects macros have on the CMB blackbody distribution and recombination history of the universe.