## Abstract Submitted for the 4CF09 Meeting of The American Physical Society

## Clustering of Primordial Black Holes and the Evolution of Bound

Systems JAMES CHISHOLM, Southern Utah University — In a previous paper, I showed that Primordial Black Holes (PBHs) are created with a high degree of spatial clustering. A consequence of this is the formation of bound PBH systems as the first gravitationally bound objects in the universe. The evolution of these systems will be discussed, with a focus on systems that undergo multiple mergers before they otherwise would have evaporated via Hawking radiation. This changes constraints both on the production of PBHs in the early universe and on the possibility of PBHs being the seeds of supermassive black holes at the centers of galaxies.

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