Abstract for an Invited Paper for the APR07 Meeting of The American Physical Society

## Intermediate Mass Black Holes and Ultraluminous X-Ray Sources PHILIP KAARET, University of Iowa

Black holes with masses intermediate between the known stellar-mass and supermassive black holes are of great interest because they may represent an intermediate stage in the formation of supermassive black holes and could be strong gravitational wave sources. Such intermediate mass black holes may form in the collapse of the first generation of stars or via collisions in the cores of dense stellar clusters. Such objects may be visible as extremely bright X-ray sources in external galaxies. I review recent observational results and theoretical work on intermediate mass black holes and ultraluminous X-ray sources.