

APR08-2008-000867

Abstract for an Invited Paper  
for the APR08 Meeting of  
the American Physical Society

### **The Astrophysical Context of Black Hole Mergers**

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Mergers between two black holes are anticipated to be key sources of gravitational waves for ground-based and space-based detectors, depending on the masses of the holes. The fundamental process of merger depends only on the mass ratios and spins of the holes, rather than on their absolute masses. This scale-independence has been exploited in numerous successful numerical simulations over the past few years. However, many aspects of the astrophysical processes affecting these systems do depend on masses. Indeed, detection and characterization of these mergers can yield unique information about stellar evolution, dynamics at many scales, and even the evolution of structure in the universe as a whole. I will give an overview of these processes and discuss future directions to pursue.