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## **Black hole Dissolution**

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Black hole evaporation is perhaps the most commonly studied way for a black hole to end. However there is another way that is both entirely classical and whose consequences have been observed hundreds of times by LIGO/VIRGO. One can sensibly understand black hole mergers as representing the formation of a new black hole followed by the destruction of the two original ones. The destruction happens deep inside the new black hole as the original black holes "dissolve" in the intense interior gravitational fields. Instances of this have now been tracked in numerical simulations but aspects of this dissolution can also be understood from exact solutions. In this talk I will review the features common to all of these examples.

Author:BOOTH, Ivan (Memorial University)Presenter:BOOTH, Ivan (Memorial University)Session Classification:Session 2.1