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Abstract for an Invited Paper for the APR16 Meeting of the American Physical Society

Edward A. Bouchet Award: Relativistic Tidal Disruption Events

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I will review the current status of modeling relativistic tidal disruption events and the prospects for detecting multi-messenger signatures. These tidal disruption events involve ultra-close encounters of stars with massive black holes. In some scenarios, the tidal disruption yields a flare followed by the prompt formation of a puffed disk accreting at a highly super-Eddington rate.