

Abstract for an Invited Paper  
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### **Numerical Simulation of Binary Black Holes**

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The coalescence of binary black hole systems is expected to be an excellent source of gravitational radiation for detectors such as LIGO and LISA. Robust, accurate, and long-term numerical simulations of astrophysically realistic binary black hole systems have yet to be achieved, but tremendous progress towards this goal has been made recently. I will discuss some of the challenges involved, present recent results, and speculate about solutions to some of the remaining problems.