

Abstract Submitted  
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**Self-force in compact binaries using the effective field theory approach** CHAD GALLEY, University of Maryland — We present our recent progress applying the effective field theory (EFT) approach to extreme mass ratio compact binaries (LISA sources) undergoing self-force from the backreaction of emitted gravitational waves. We focus our attention on the second order self-force on the small compact object and the corresponding emitted gravitational waves, which are both needed for doing precision gravitational wave astronomy with LISA. We also present recent work in applying the EFT approach to LIGO sources, time permitting.

Chad Galley  
University of Maryland

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