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Gravitational radiation during plunge - a Green's function approach SOURABH NAMPALLIWAR, RICHARD PRICE, Univ of Texas, Brownsville, GAURAV KHANNA, University of Massachusetts, Dartmouth — During the merger of binary compact objects, an important stage is the plunge. A short part of the Gravitational waveform, it marks the end of early inspiral and determines the quasinormal ringing (QNR) of the final product of the merger. In this talk, we describe the approach of using the Fourier domain Green's function in the particle perturbation approximation to understand the excitation of QNR. We show that the resulting understanding is successful in explaining QNR in toy models and in the Schwarzschild background.

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