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Parameter estimation for inspiraling compact binaries with small orbital eccentricity¹ MARC FAVATA, Montclair State University — While most observable inspiraling compact binaries are expected to be nearly circularized, some studies suggest that eccentricity will be non-negligible for a fraction of detectable events. We have recently developed a family of analytic post-Newtonian approximants that incorporate small orbital eccentricity. Using this waveform family we study how well eccentricity and other binary parameters can be measured using ground-based gravitational-wave interferometers.

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