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Reduced Basis for Gravitational Waves MANUEL TIGLIO, University of Maryland, SCOTT FIELD, Brown University, CHAD GALLEY, Jet Propulsion Laboratory - California Institute of Technology, FRANK HERRMANN, University of Maryland, JAN HESTHAVEN, Brown University, EVAN OCHSNER, University of Wisconsin-Milwaukee — We introduce Reduced Basis (RB) as a method for gravitational wave representation and analysis. We comment on computational aspects and compare template catalogs for different detectors to other methods. In particular, we point out exponential convergence on the error of the resulting RB catalogs with the number of templates.

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