Search techniques for gravitational wave bursts from cosmic strings

XAVIER SIEMENS, JOLIEN CREIGHTON, University of Wisconsin – Milwaukee, IRIT MAOR, Case Western Reserve University, SAIKAT RAY MAJUMDER, KIPP CANNON, JOCELYN READ, University of Wisconsin – Milwaukee — We discuss data analysis techniques that can be used in the search for gravitational wave bursts from cosmic strings. In the absence of a detection, we show how to set upper limits based on the loudest event. Using Initial LIGO sensitivity curves, we show that these upper limits may result in interesting constraints on the parameter space of theories that lead to the production of cosmic strings.