Abstract Submitted for the APR05 Meeting of The American Physical Society

Results of searches for low-mass binary coalescences on LIGO data EIRINI MESSARITAKI, University of Wisconsin – Milwaukee, LIGO SCI-ENTIFIC COLLABORATION — The LIGO Scientific Collaboration is currently involved in various searches for gravitational waves from coalescences of low-mass binary systems. In this talk we report on the search for coalescences of neutron star binaries, with component masses between 1 and 3 solar masses, and on the search for coalescences of primordial black hole binaries, with component masses between 0.2 and 1 solar masses, using the data from the second science run of the 3 LIGO intereferometers. No candidate gravitational wave signals were identified. The results have been used to calculate upper limits on the rate of low-mass compact binary coalescences in the universe.

Eirini Messaritaki, for the LSC University of Wisconsin – Milwaukee

Date submitted: 14 Jan 2005

Electronic form version 1.4