Abstract Submitted for the APR05 Meeting of The American Physical Society

The Search for a Stochastic Gravitational Wave Background VALERY FROLOV, LIGO SCIENTIFIC COLLABORATION — Detection of a stochastic background of gravitational waves of cosmological origin would provide a unique view of conditions in the very early universe. There are astrophysical observations that provide meaningful upper limits to such a background. Measurements using earth based gravitational wave detectors are now beginning to provide interesting upper limits as well. The techniques and status of searching for a gravitational wave background using the LIGO interferometers will be presented, and the prospects for ultimately detecting such a background will be discussed.

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Date submitted: 21 Jan 2005 Electronic form version 1.4