## Abstract Submitted for the SES07 Meeting of The American Physical Society

The New Era in Gravitational Wave Searches Has Begun WAR-REN JOHNSON, Lousiana State University, LIGO SCIENCE COLLABORATION — The Laser Interferometer Gravitational wave Observatory (LIGO) has just finished taking data for its first long observing run at design sensitivity. It had a sensitivity that was one to two orders of magnitude better that the best previous searches. There is a full year of coincident data with 3 LIGO detectors, and 4 months of 4 detector coincident data, when the VIRGO interferometer agreed to join in a grand world-wide collaboration. Analysis of the new data is proceeding at a rapid pace, and we hope soon to learn if there is positive or negative evidence for waves at this new level of sensitivity. In any case, two stages of detector upgrades are underway or planned, and prospects seem bright for the eventual commencement of gravitational wave astronomy.

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