

Abstract Submitted
for the APR05 Meeting of
The American Physical Society

LIGO: Creating enhancements to the undergraduate physics experience¹ S.C. MCGUIRE², Southern University — Over the past four years we have initiated a program of research and educational outreach between the Laser Interferometer Gravitational-wave Observatory (LIGO) and the Department of Physics at Southern University-Baton Rouge that has enabled undergraduate physics majors to participate in a broad array of research based activities. Our emphasis has been on the integration of research into the educational experience of our physics majors. Specifically, students participate in research at the LIGO Livingston Observatory during the summers with LIGO scientists in addition to year round faculty-supervised research on campus. In continuing their research on campus students may also obtain academic credit toward graduation by enrolling in a research course, receiving Honors College Credit and/or incorporating the research into undergraduate theses. Through the LIGO Science Education Center (SEC) Outreach Project, we are revamping parts of our undergraduate curriculum to emphasize LIGO science particularly as relates to K-12 teacher preparation. Examples of activities will be presented.

¹Work supported by NSF Grants No(s). PHY-0101177 and PHY-0355471.

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Date submitted: 12 Jan 2005

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