

**Design and Construction of the PEP-II Low-Energy Ring**<sup>\*</sup>, H. HSIEH, R. YOURD, M.S. ZISMAN, LBNL, for the PEP-II LER Design Team - We describe the design and construction status of the Low-Energy Ring (LER) of the PEP-II project, a collaboration of SLAC, LBNL, and LLNL. In the past year we have optimized LER parameters and started component fabrication. By reusing the original PEP wigglers, we were able to simplify the design of the distributed wiggler photon dump, which must dissipate 260 kW of power. The number of RF stations (each comprising a klystron powering two 476-MHz cavities) was reduced from 4 to 3. We have begun fabrication of the arc vacuum system based on an extruded Al antechamber configuration with discrete photon stops and TSPs. The design of straight section vacuum components, to be fabricated from stainless steel pipe, is also completed. LER quadrupoles and dipoles are being provided under a collaborative agreement with IHEP (Beijing); correctors and skew quadrupoles are being built domestically and sextupoles are being refurbished from existing PEP magnets. LER commissioning will begin early in 1998.

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