

Magnetic measurements of the 10T Superconducting Wiggler for the SPring-8 storage ring.

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The results of magnetic field measurements of the 10 Tesla superconducting wiggler are described. The wiggler was designed and fabricated by Budker INP in collaboration with RIKEN-JASRI for installation to the SPring-8 storage ring in frame of the ISTC project "Budker INP/RIKEN Slow Positron Source"*. In February of 2000 the final test and magnetic measurements of superconducting wiggler were carried out on the SPring-8 site. The magnetic field maps at different field levels and ratios between the feeding currents for the first field integral to be zero were obtained. The accurate correlation between the field, which measured by NMR in the iron yoke and the median plane field were measured. The cryogenic system of the cryostat was checked. The measurement results will be used to define the effect of the wiggler on the electron beam of the storage ring.

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