

## Test results of highly-damping components mounted to the support system for the KEKB final focusing magnets

*Tuesday, 11 September 2012 14:40 (5 minutes)*

Construction of the SuperKEKB has been progressing in KEK. The target luminosity of the SuperKEKB is  $8 \times 10^{35} \text{ cm}^{-2}\text{s}^{-1}$ , which is 40 times larger than the world record luminosity by the KEKB. Since the vertical beam sizes of electron and positron are designed to be squeezed to the level of 50 nano-meter at the interaction point, vibration of the final focusing magnets generated by the ground motion has an important effect on the luminosity and has to be kept below the allowable amplitude.

In order to isolate vibration from the floor, we plan to install the structural components of highly-damping material into the system. They are expected to minimize amplitude response against the ground motion. The evaluation test was carried out with the real support system for the KEKB final focusing magnets. The proper location for the material to be inserted was determined by the preliminary calculation, and then vibration measurements have been carried out.

Test results of the vibration measurements will be presented and the effects of the high dumping material will be discussed.

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**Session Classification:** Poster Presentations (5 minutes per poster)

**Track Classification:** Poster Presentations