International Workshop on Accelerator Alignment 2010



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Vibration issues for SuperKEKB

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The KEKB B-Factory will be upgraded to SuperKEKB using the same tunnel as KEKB. The SuperKEKB design peak luminosity is 40 times higher than the world record luminosity which KEKB has achieved. The upgrade is based on the "Nano-Beam" scheme, wherein the beam size is reduced to less than 100 nanometers in the vertical direction at the interaction point (IP). Vibration in the tunnel, especially at the IP, could be a critical issue which may result in luminosity degradation. Vibration measurements made at several locations including the present KEKB tunnel, the BELLE detector, and the final focus quadruple magnets will be reported.

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