## Abstract Submitted for the MAR08 Meeting of The American Physical Society

## Two-particle Interferometry with Filtering Operations S.-S. B.

LEE, H.-S. SIM, Korea Advanced Institute of Science and Technology — We generalize the conventional two-particle interferometer by including filtering operations. We find that after appropriate local filtering operations, the concurrence, a two-particle entanglement measure, can be directly obtained from the visibility of the two-particle interference, even for mixed states. This indicates that entanglement is associated with experimentally feasible properties.

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Date submitted: 23 Nov 2007 Electronic form version 1.4