Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Probing states with macroscopic circulations in magnetic photonic crystals SIU TAT CHUI, University of Delaware, ZHIFANG LIN, Fudan University — We predict that when light is reflected off a magnetic photonic crystal (MPC) there is a grazing component that is **parallel** to the surface; the magnitude of this component can be changed by an external field. The direction of this parallel component is reversed (dotted line) as the direction of the magnetization is reversed. This provides a way to probe states with macroscopic circulations inside the MPC.

Siu Tat Chui
University of Delaware

Date submitted: 16 Oct 2007 Electronic form version 1.4