## Abstract Submitted for the TSF11 Meeting of The American Physical Society

Quantum storage based on spacial angular control XIWEN ZHANG, Institute for Quantum Studies and Department of Physics, Texas A&M University, ALEXEY KALACHEV, Institute for Quantum Studies and Dept. of Physics, Texas A&M University; Zavoisky Physical-Technical Institute of the Russian Academy of Science, OLGA KOCHAROVSKAYA, Institute for Quantum Studies and Department of Physics, Texas A&M University — We consider the realization of Quantum Memory through off resonant Raman interaction in a three level solid state medium, via angular manipulation of the control field. We find it is in principle possible to obtain retrieval signal with almost one hundred percent efficiency and fidelity in free space.

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