Abstract Submitted
for the MAR06 Meeting of
The American Physical Society

Dynamic learning of an experimental entanglement witness for an n-qubit system[1] KATHLEEN WALSH, ELIZABETH BEHRMAN, Department of Physics, Wichita State University, JAMES STECK, Department of Aerospace Engineering, Wichita State University, STEVEN SKINNER, Department of Electrical and Computer Engineering, Wichita State University — We extend our previous work on dynamic learning of an entanglement witness for a two-qubit system to n qubits, and show detailed comparisons for the two- and three-qubit systems to published entanglement measures. Our method can also be used for quNits, and can handle a small amount of noise and decoherence.

[1]Supported by NSF, ECS 0201995

Kathleen Walsh
SPS

Date submitted: 28 Nov 2005 Electronic form version 1.4