Abstract Submitted
for the MAR11 Meeting of
The American Physical Society

Impurity-entanglement in dimerized spin chains ANDREAS DESCHNER, ERIK SORENSEN, McMaster University — To quantify the entanglement caused by an impurity in an $S = \frac{1}{2}$ dimerized $J_1 - J_2$ quantum spin chain, several different entanglement-measures have been utilized. We present the results of variational calculations of the impurity entanglement entropy as well as the negativity for a chain with an impurity attached at one end. We compare the results for both of these measures.

Andreas Deschner
McMaster University

Date submitted: 19 Nov 2010 Electronic form version 1.4