Abstract Submitted for the MAR12 Meeting of The American Physical Society

Different Measures of Entanglement in Spin Chains

VLADIMIR KOREPIN, Yang Institute for Theoretical Physics in Stony Brook — Different measures of entanglement in spin chains are considered. Main example is VBS state, it is important because of measurement based quantum computation. Entanglement spectrum and negativity are considered in the lecture. These measures are calculated analytically in one dimension. In 2D we have only estimates. Lecture follows the papers: http://arxiv.org/abs/1109.4971 and http://arxiv.org/abs/1110.3300

[1] Heng Fan, Vladimir Korepin, Vwani Roychowdhury, PRL, vol 93, (2004), 227203

Vladimir Korepin Yang Institute for Theoretical Physics in Stony Brook

Date submitted: 19 Oct 2011 Electronic form version 1.4