1145-82-1782 Houssam Abdul-Rahman, Christoph Fischbacher* (cfischb@uab.edu) and Gunter Stolz. Recent Progress on the Quantum XXZ Spin Model on General Graphs.

We report on recent progress on the XXZ quantum spin model defined on general graphs. After reviewing its general definition, we discuss Combes-Thomas bounds from which we derive estimates on the structure of eigenfunctions and on spectral projections. We use this to show bounds on entanglement entropy in various situations. (Received September 24, 2018)