1163-46-504 **Douglas Farenick, Farrah Huntinghawk, Adili Masanika** and **Sarah Plosker*** (ploskers@brandonu.ca), Brandon, Manitoba R7A6A9, Canada. Complete Order Equivalence of Spin Unitaries.

In this talk, we study spin systems, which are finite sets of anticommuting selfadjoint unitary matrices. We focus on complete order isomorphisms between these linear spaces of matrices: linear isomorphisms such that the matricial order within these spaces is preserved. We extend our work to the case of countable many unitaries. We also connect our findings to recent developments on the topic of free spectrahedra and matrix convex sets (in particular, maximum spin balls). (Received September 08, 2020)