Assessing approximations to spin dynamics using a geometric representation of spin correlations RICK MUKHERJEE, KENNETH WANG, TONY MIRASOLA, KADEN HAZZARD, Rice University — We have developed a geometric way to visualize spin correlations, including their dynamical evolution. Phenomena that look complicated and mysterious when analyzed by the components of their correlations become simple and intuitive when described geometrically. We will describe how this geometric representation provides insight into the accuracy of various approximations to the dynamics, such as truncated Wigner approximations.