Diagrammatic Moves on 3-Diagrams. Preliminary report.

The classical theory of knots and links is often approached via link diagrams and Reidemeister moves. Recently, several papers have explored the topic of link diagrams with multi-crossings. In these diagrams, $n$ strands are allowed to cross at a single point in the plane, creating what is known as an $n$-crossing. Many of the obvious results analogous to classical diagrams have been proven. However, until now, no analog of the Reidemeister moves have yet to be found for multicrossing diagrams. In this talk I will describe a set of 3-crossing diagram moves and prove that they are sufficient to pass between any two 3-crossing diagrams of the same knot. (Received February 17, 2017)