Alexander Zupan* (zupan@unl.edu). Diagrammatics of knotted surfaces. Preliminary report.

Tri-plane diagrams are one of many ways to draw a picture representing a knotted surface in the 4-sphere. A more classical depiction of a knotted surface is a broken surface diagram, which is an immersed surface in 3-dimensional space with “crossing” data at double and triple points – both classical knot diagrams and classical broken surface diagrams are generic projections equipped with crossing information. I’ll discuss a new method which converts a tri-plane diagram to a broken surface diagram, with relevant examples. (Received February 20, 2018)