

1095-54-269

**Ellie Anne Grano\*** ([ellie.grano@pepperdine.edu](mailto:ellie.grano@pepperdine.edu)), 17311 Castellammare Dr., Apt. 2E,  
Pacific Palisades, CA 90272. *The pop-switch planar algebra and the Jones-Wenzl  
projections*. Preliminary report.

The pop-switch planar algebra is a new planar algebra containing the Temperley-Lieb planar algebra. It is motivated by Jones' idea of the "graph planar algebra" of type  $A_n$ . Complicated calculations using the graph planar algebra can be done pictorially in this new planar algebra.

The Jones-Wenzl projections are important elements of the Temperley-Lieb planar algebra, yet are very complicated to write down. Viewing the pop-switch planar algebra as a matrix category, the Jones-Wenzl projections are direct sums of very simple diagrams. I will present this new planar algebra and discuss this method of viewing the Jones-Wenzl projections. (Received September 10, 2013)