

Generalized Lantern Relations and Planar Line Arrangements

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In this paper we show that to each planar line arrangement defined over the real numbers, for which no two lines are parallel, one can write down a corresponding relation on Dehn twists that can be read off from the combinatorics and relative locations of intersections. This leads to an alternate proof of Wajnryb's generalized lantern relations, and of Endo, Mark and Horn-Morris' daisy relations.

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