Nicole Yamzon\* (nyamzon2@illinois.edu). Toric Ideals of Tiling Spaces. Preliminary report. Consider the set of all domino  $(2 \times 1)$  tilings of an  $(m \times n)$  rectangle. How can we move from one tiling to another? In 1990 William Thurston proved that the set of two-dimensional domino tilings are connected by flips. We will provide an analogous proof of Thurston's result by using the language of toric ideals. (Received September 23, 2018)