Robert Adler, Moshe Cohen* (mcohen@vassar.edu) and Sunder Ram Krishnan. Towards a central limit theorem for random 2-bridge Chebyshev billiard table diagrams.

Koseleff and Pecker show that all knots can be realized as trajectories on billiard tables together with crossing information. We randomize this knot diagram model by flipping a coin at each 4-valent vertex of the trajectory.

We truncate this model to study 2-bridge knots together with the unknot, giving the exact probability of a knot arising here. Furthermore, with Chaim Even-Zohar and Sunder Ram Krishnan we give the exact probability of obtaining a knot with crossing number c.

I will discuss preliminary work towards a central limit theorem for the probability of obtaining a knot with crossing number c in this truncated model. (Received January 12, 2017)