

1099-57-398

Mieczyslaw K. Dabkowski* (mdab@utdallas.edu) and **Changsong Li.** *Catalan and Kauffman States of Lattice Crossing.* Preliminary report.

For lattice crossing $L(m, n)$ we show which Catalan connections between $2(m + n)$ points on the boundary of $m \times n$ rectangle P can be realized as Kauffman states and we give an explicit formula for the number of such connections. In some special cases of Catalan connection, we also give a formula for their coefficients in the Relative Kauffman Bracket Skein Module of $P \times I$. (Received February 11, 2014)