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M K Dabkowski* (mdab@utdallas.edu) and **J H Przytycki** (przytyck@gwu.edu). *Coefficients of Catalan states obtained from lattice crossing.*

For a Catalan state C of a lattice crossing $L(m, n)$ with no returns on one side, we find its coefficient $C(A)$ in the Relative Kauffman Bracket Skein Module expansion of $L(m, n)$. We show, in particular, that $C(A)$ can be found using the plucking polynomial of a rooted tree with a delay function associated to C . For C with returns on one side only, we prove that $C(A)$ is a product of Gaussian polynomials. Furthermore, for an arbitrary Catalan state C obtained from $L(m, 3)$, we give a method to compute $C(A)$. (Received September 04, 2018)