1107-16-213 **Chun-Ju Lai*** (cl8ah@virginia.edu) and **Li Luo**. *An elementary approach to monomial and canonical bases of quantum affine* $\mathfrak{gl}_n$.

In 1990 Beilinson, Lusztig and MacPherson provided a geometric realization of modified quantum $\mathfrak{gl}_n$ and its canonical basis. An essential step of their work is a construction of a monomial basis. Recently, Du and Fu provided an algebraic construction of canonical basis for modified quantum affine $\mathfrak{gl}_n$, which among other results used an earlier difficult construction of a monomial basis using Ringle-Hall algebra of the cyclic quiver. In this talk, we will give an elementary algebraic construction of a monomial basis and hence canonical basis for modified quantum affine $\mathfrak{gl}_n$. This is a joint work with Li Luo (Shanghai). (Received January 15, 2015)