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*Hopf monoid for supercharacter and NCSym*

I am combining recent work with Thiem and with Aguiar-Thiem.

With Nat Thiem, we have defined a new basis of symmetric functions in noncommutative variables that depends on a parameter  $q$ . This new basis is natural in the context of (coarser) supercharacter theory of the unipotent uppertriangular matrices over a finite fields  $F_q$ . I will introduce this in the setting of Hopf monoid and show how to compute antipode and primitives as done with Aguiar and Thiem.