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Aaron Lauve* (lauve@lacim.uqam.ca), LaCIM, Université du Québec à Montréal, Case Postale 8888, succursale Centre-ville, Montréal, Québec H3C 3P8, Canada. *Noncommutative Flag Varieties and Yangians.*

It is well-known that the Yangian $Y(n)$ over \mathfrak{gl}_n somewhat resembles the universal enveloping algebra on \mathfrak{gl}_n . In this work, we show it also possesses some features of the ring of regular functions on GL_n . In particular, we use the theory of quasideterminants to construct noncommutative flags and Grassmannians naturally associated to the ring $Y(n)[[u^{-1}]]$. In so doing, some new subalgebras of $Y(n)$ are introduced and new relations in $Y(n)$ are revealed. Finally, we relate these constructions to the new parabolic presentations of $Y(n)$ given by Brundan and Kleshchev (2005). (Received September 04, 2005)