1154-60-2455   **Jonathan M. Wells*** (`wellsj@reed.edu`), 3203 Southeast Woodstock Boulevard, Portland, OR 97202-8199. *Hyperpfaffian descriptions of β-ensembles when β is a perfect square.* Preliminary report.

We use combinatorial identities in the shuffle and exterior algebra to present hyperpfaffian formulations for the partition functions of β-ensembles with arbitrary probability measure, when β is a square integer. This is an analogue of the de Bruijn integral identities for the $\beta = 1$ and $\beta = 4$ ensembles of Hermitian matrices in random matrix theory. (Received September 17, 2019)