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Wlodek Bryc* (brycw@math.uc.edu), Department of Mathematical Sciences, University of Cincinnati, 2855 Campus Way, Cincinnati, OH 45221-0025. *q-Wishart matrices*.

We consider a class of $N \times N$ matrices with noncommutative entries that depend on an auxiliary parameter $q \in [-1, 1]$. For $q = 1$, these are the classical Wishart matrices, while for $q = 0$ such matrices have the Marchenko-Pastur law. After centering by the mean, traces of polynomials in such matrices converge in distribution. The limit law is normal law when $q = 1$, a semicircle law when $q = 0$, and depends on the polynomial for general q . (Received January 27, 2008)