1025-60-149 **W Bryc***, Department of Mathematical Sciences, University of Cincinnati, Cincinnati, OH 45221.
Asymptotic normality for traces of polynomials in independent complex Wishart matrices.

We derive a non-asymptotic expression for the moments of traces of monomials in several independent complex Wishart matrices, extending some explicit formulas available in the literature. We then deduce the explicit expression for the cumulants. From the latter, we read out the multivariate normal approximation to the traces of finite families of polynomials in independent complex Wishart matrices. (Received January 21, 2007)