

CHARLIER AND EDGEWORTH EXPANSIONS FOR DISTRIBUTIONS AND
DENSITIES IN TERMS OF BELL POLYNOMIALS

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Abstract: We show that the coefficients of the Charlier differential series for distributions and densities are simply Bell polynomials in the cumulants. The same is true for the Edgeworth expansions of distributions and densities of sample means. We use this to obtain higher order extensions of these well-known series.

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