

On the probable error of constants obtained by linear interpolation.—*By* P. C. MAHALANOBIS.

In Physics linear interpolation is very commonly used for finding the "best" value of a constant. The straight line used for interpolation should of course, be the line of best fit, which is statistically the same as the principal axis of the correlation ellipse. In the present paper the probable error of a constant interpolated from the line of best fit is calculated in terms of the means, the standard deviations and the correlation of the two variables. Numerical examples will be given.