

**THE FOLDED  $t$  DISTRIBUTION**

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**ABSTRACT**

Measurements are frequently recorded without their algebraic sign. As a consequence the underlying distribution of measurements is replaced by a distribution of absolute measurements. When the underlying distribution is  $t$  the resulting distribution is called the "*folded- $t$  distribution*". Here we study this distribution, we find the relationship between the folded- $t$  distribution and a special case of the folded normal distribution and we derive relationships of the folded- $t$  distribution to other distributions pertaining to computer generation. Also tables are presented which give areas of the folded- $t$  distribution.