Package: StatTools (via r-universe)

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Title All-in-One Chi Distribution CI

Version 0.1.1

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Description Computes confidence intervals for variance using the Chi-Square distribution, without requiring raw data. Wikipedia (2025) <https://en.wikipedia.org/wiki/Chi-squared_distribution>. 'All-in-One Chi Distribution CI' provides functions to calculate confidence intervals for the population variance based on a chi-squared distribution, utilizing a sample variance and sample size. It offers only a simple all-in-one method for quick calculations to find the CI for Chi Distribution.

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Imports stats

Suggests testthat

Encoding UTF-8

RoxygenNote 7.3.2

NeedsCompilation no

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`chi_var_ci_no_data` *Compute Confidence Interval for Variance Without Raw Data*

Description

This function calculates the confidence interval for variance when only + the sample variance and sample size are known.

Usage

```
chi_var_ci_no_data(s2_given, n_given, conf_level)
```

Arguments

`s2_given`	Numeric. The sample variance.
`n_given`	Integer. The sample size.
`conf_level`	Numeric. The confidence level (e.g., 0.95 for 95% CI).

Value

A numeric vector with the lower and upper bounds of the confidence interval.

Examples

```
s2_given <- 21.5   # Sample variance
n_given <- 26      # Sample size
conf_level <- 0.98 # 98% confidence level
chi_var_ci_no_data(s2_given, n_given, conf_level)
```

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