

博士论坛

## 广义区间上的泛逻辑自相关系数求解

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**摘要** 广义自相关系数的求解是泛逻辑在不确定性推理中需要解决的关键问题之一。称任意  $[a, b]$  区间为广义区间, 在广义区间上给出了广义N范数、广义N性生成元、广义自相关系数的定义。提出了由复杂系统参数的分布函数求解广义自相关系数的一般方法, 给出并证明了重要的直通NLK公式。最后举例说明了求解k值的具体, 为从数学模型和逻辑推理两个角度来分析复杂系统参数间的相关性提供了一种新的思路。

**关键词** [泛逻辑](#) [广义区间](#) [广义N范数](#) [广义自相关性系数](#) [直通NLK公式](#)

分类号

## Solution to generalized self-correlation coefficient on generalized interval

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### Abstract

In the process of uncertainty reasoning with universal logic, it is a key problem to calculate the value of generalized self-correlation coefficient "k". In this paper, any  $[a, b]$  interval is called generalized interval. Authors give the definitions of generalized N-norm, generalized N-generator, and generalized self-correlation on generalized interval. For the first time, authors put forward an general method for calculating generalized self-correlation coefficient from distributing functions of parameters in complicated system, give and prove the important straight NLK formula, which has good applications in universal logic reasoning now. The work offers a new idea of analyzing the correlation of parameters in complicated system from both viewpoints of mathematic model and logic reasoning.

**Key words** [universal logic](#) [generalized interval](#) [generalized N-norm](#) [generalized self-correlation](#) [straight NLK formula](#)

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