

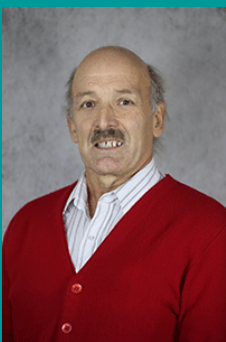
Data: 03/07/2018

Hora: 15h

## Interval arithmetic: Fundamentals, History, and Applications

In this tutorial survey, we introduce the underlying motivations for interval arithmetic, along with the basic operations. We highlight notable successes in applying interval arithmetic, we give a history of interval arithmetic, and mention problems and pitfalls. We also discuss IEEE 1788-2015, the standard for interval arithmetic, and other available software.

**Palestrante:** Prof. Ph.D. Ralph Baker Kearfott - University of Louisiana Lafayette, Louisiana USA  
Ph.D. 1977 University of Utah  
M.S. 1974 University of Utah  
B.S. 1972 University of Utah



Prof. Kearfott's research interests are clustered in several areas. These include global optimization, software development and computer arithmetic, interval computations, and modeling associated with operations research problems. Specifically, one aspect of his work focuses on branch and bound algorithms for continuous global optimization, with an emphasis on accounting for roundoff error to obtain mathematically rigorous bounds. This work has grown out of an interest to understand nonlinear systems, including parametrized systems and singularities. In the operations research line, Prof. Kearfott has collaborated with the Center for Business Information Technology and a graduate student to develop a model, specific to Lafayette Parish, for pre-placement of post-emergency relief supplies; that project led the student and Prof. Kearfott to develop an extensive knowledge of transportation and facility location models.

Programa de  
Pós-graduação

**MMQ**  
Modelagem e Métodos Quantitativos

### Local de Realização:

Auditório  
Bloco 912 - Térreo  
Dpto de Geologia  
Campus do Pici, UFC

### Mais informações:

E-MAIL: [mmq@dema.ufc.br](mailto:mmq@dema.ufc.br)  
telefone: (85) 33669156 ou  
(85) 33669840