

Preface

This is a special issue containing selected uncertainty-related papers presented at the annual workshops on computational sciences, computer science, and mathematics organized by the University of Texas at El Paso (UTEP) and the New Mexico State University (NMSU) under the sponsorship of the Computing Alliance of Hispanic-Serving Institutions (CAHSI) and the NSF-supported Center of Excellence for Sharing Resources to Advance Research and Education through Cyberinfrastructure (Cyber-ShARE), and at several related meetings.

These papers deal with different types of uncertainty:

- interval (Villaverde and Kosheleva),
- fuzzy (Nava), including “fuzziness” of commonsense terms (Jalal-Kamali et al.),
- uncertainty related to constraints (Cardenas et al., Villaverde Kosheleva et al.),
- uncertainty described by general partial orders (Zapata et al.).

Several papers deal with actual and potential applications:

- to neural networks (Nava et al.),
- to DNA analysis (Kreinovich et al.), geosciences (Cardenas et al.),
- to physics in general (Jala-Kamali et al., Zapata et al.),
- to quantum physics in particular (Cuellar et al., Jackson et al., Zakharevich et al.), and
- to education (Ceberio et al., Kosheleva, Villaverde and Kosheleva).

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Martine Ceberio and Vladik Kreinovich
co-editors of the special issue