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Sijia Liu* (sijialiu@iastate.edu), 485 Carver Hall, Iowa State University, Ames, IA 50010.

Novel clustering methods for the analysis of biological data.

The need to interpret and extract possible inferences from high-dimensional datasets has led over the past decades to the development of dimensionality reduction and data clustering techniques. In this talk, we present a family of novel fuzzy spectral clustering algorithms that combine seamlessly the strengths of existing spectral approaches to clustering with various desirable properties of fuzzy methods. We discuss examples of biological datasets for which the developed methodology outperforms other frequently used algorithms. (Received February 16, 2010)