Johanna Franklin
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Johanna Franklin, an associate professor of mathematics at Hofstra University is primarily interested in algorithmic randomness and recursion theory. Other research interests include: mathematical logic, computability theory, effective analysis, and computable model theory. She received her BS and in Mathematical Sciences with minors in Physics and Linguistics and MS in Mathematical Sciences in 2001 from Carnegie Mellon University in Pittsburgh, PA. She received her Ph.D. in Logic in 2007 from University of California, Berkeley.

Iowa Colloquium on Information, Complexity and Logic in Computation (ICICL)

November 9, 2017, 3:10-4:00pm, Food Sc 2432

Computable categoricity of random fields

The algebraic fields of characteristic 0 can be classified using a computable homeomorphism onto Cantor space. This enables us to define a random field as one that is mapped to a random element of Cantor space. In this talk, I will discuss the computable categoricity of random fields in the contexts of two different languages: the standard language of fields and an expanded language with root predicates that hold when their inputs define polynomials that have roots in the field under consideration.

This work is joint with Russell Miller.

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