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Wesley Calvert* (wcalvert@siu.edu), Department of Mathematics, Mail Code 4408, 1245
LINCOLN DRIVE, CARBONDALE, IL 62918. *Computability and Continuous Logic*.

Continuous first-order (CFO) logic arose in efforts to use model-theoretic ideas about independence in certain analytic contexts (collectively called "metric structures"). It also has a natural relationship with randomized computation, in that an effective completeness theorem guarantees a probabilistically computable model of every decidable CFO theory.

In the present talk, we will discuss computability-theoretic aspects of metric structures and CFO logic, and their relations to several other aspects of logic and computation, including random structures, probability, and complexity. (Received March 21, 2017)