First-order fuzzy logics and their model theory

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A coherent commitment to fuzzy logic as a viable tool for modeling reasoning with graded predicates needs to go beyond the expressive power provided by propositional and modal languages, and consider as well first-order formalisms. After more than three decades of slow development, the study of first-order fuzzy logics is gaining momentum and giving rise to a corresponding model theory that deviates in crucial aspects from the classical model theory. The aim of this talk is to survey the current state of art and some of its challenges.