

Louise Hay Logic Seminar

Randomizations

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Abstract: Keisler first introduced the notion of the randomization of a structure M : a new structure whose universe is a set of "random elements" of M . It was later discovered that it is natural to consider Keisler's randomizations in the framework of continuous logic, and in this way, a class of continuous structures arises naturally from existing first order structures. As such, for a classical first order theory T , we get a continuous theory T^R , whose models are essentially spaces of M -valued random variables, where M is a model of T .

In this talk we will discuss the technical considerations required to consider randomizations as continuous structures and some of the properties of theories which are preserved. If time permits, we will discuss Ben Yaacov's proof that randomizing a theory preserves (the continuous analog of) NIP.

Thursday, February 26 at 4:00 PM in SEO 427