

**Louise Hay Logic Seminar**

*VC Dimension, VC Density, and the Sauer-Shelah Dichotomy - Part II*

Roland Walker (UIC)

**Abstract:** Vapnik-Chervonenkis dimension and density are two measures of combinatorial complexity which arose from the study of probability theory. During this two-part talk, we will discuss these measures and their duals both in the classical and model-theoretic contexts, prove the famous Sauer-Shelah Lemma, discuss the relationship between VC dimension and NIP, and time permitting discuss some recent applications and open questions.

Thursday, September 28 at 1:00 PM in SEO 427