Uri Andrews and Isaac Goldbring* (isaac@math.uic.edu), Department of Mathematics, Statistics, and CS, Science and Engineering Offices (M/C 249), 851 S. Morgan St., Chicago, IL 60607-7045, and H. Jerome Keisler. A survey on Keisler randomizations.

Given a first-order structure $\mathcal{M}$, Keisler introduced the structure $\mathcal{M}^R$, the randomization of $\mathcal{M}$, which essentially consists of the space of $\mathcal{M}$-valued random variables. Initially the randomized structure was considered in first-order logic, but with the help of Itaï Ben Yaacov, the theory of randomizations was placed into the correct framework of continuous logic.

In this talk, I will survey some of the known results concerning the model-theoretic properties of randomizations of structures, showing how the randomization process often preserves many of the model-theoretic properties of the original structure.

I will end by reporting on some recent work, joint with Uri Andrews and H. Jerome Keisler, where we explore definability and various notions of independence in randomizations. (Received September 03, 2013)