

**Speaker:** Dan Dix (USC)

**Title:** Disintegration of Borel probability measures on Polish spaces

**Abstract:** For an arbitrary sub-sigma algebra of the Borel sigma algebra the conditional expectation operator can be defined using the Radon-Nikodym theorem, but on Polish spaces a regular family of conditional probability measures can be constructed by which the conditional expectation can be computed. The details of this construction will be outlined, as well as discussing the degree of uniqueness of this family.