1119-35-53 **Kenneth L. Kuttler*** (klkuttle@math.byu.edu), Provo, UT 84602. *Measurable solutions to evolution inclusions.*

A systematic way to study the existence of measurable solutions to stochastic evolution inclusions including those of the form

$$u' + A\left(u\left(\cdot,\omega\right),\omega\right) \ni f\left(\cdot,\omega\right) \text{ in } L^{p'}\left(\left[0,T\right];V'\right),\ u\left(0,\omega\right) = u_0\left(\omega\right)$$

is presented. Here ω is in Ω where $(\Omega,\mathcal{F})$ is a completely arbitrary measurable space. No reference to a measure is needed. It is based on a new result which gives the existence of product measurable selections in a set of weak limits of functions $u_n\left(\cdot,\omega\right)$ each of which is known to be product measurable (solutions to approximate problems). This general approach provides a way to study a variety of processes that are described by stochastic differential inclusions in which the coefficients and the inputs have random components. Examples of some nonlinear problems are described. (Received February 03, 2016)