1065-30-100 **Constanze D Liaw*** (conni@math.tamu.edu), Department of Mathematics, Mailstop 3368, College Station, TX 77845. *Deterministic Properties of Anderson-type Hamiltonians.*

An Anderson-type Hamiltonian is a self-adjoint operator on a separable Hilbert space $\mathcal{H}$ which is formally given by $A_\omega = A + V_\omega$ where $V_\omega = \sum_n \omega_n(\,\cdot\,, \varphi_n)\varphi_n$. Here $\{\varphi_n\} \subset \mathcal{H}$ is a sequence and $\omega = (\omega_1, \omega_2, \ldots)$ is a sequence of independent random variables corresponding to a probability measure $\mathbb{P}$ on $\mathbb{R}^\infty$ which is merely assumed to satisfy Kolmogorov's 0-1 law. The main result states that, under mild cyclicity conditions, the essential parts of A_ω and A_η are almost surely (with respect to the product measure $\mathbb{P} \times \mathbb{P}$) unitary equivalent modulo a rank one perturbation. Following ideas developed by A. G. Poltoratski, we will explain how the Krein–Lifshits spectral shift for rank one perturbations represents the central tool of its proof. (Received September 06, 2010)