1014-03-601   **Alexander Berenstein*** (`ajberensteino@unal.edu.co`), Universidad Nacional de Colombia, Departamento de Matemticas, Av. Cra 30 No. 45-03, Bogota, Colombia. *Hilbert spaces with generic groups of automorphisms.*

We study representations π of countable groups as unitary maps on an infinite dimensional Hilbert space H. We show that the collection of maps π that induce existentially closed expansions of H coincides with the collection of maps that are maximal with respect to the ordering induced by weak cotainment. We use this result to show the axiomatizability of the class of existentially closed Hilbert spaces expanded by a countable group of automorphisms. We also prove this new theory is superstable. (Received September 21, 2005)