1023-47-1397 **Raluca Dumitru*** (`dumitrra@email.uc.edu`), 4724 Williamsburg rd nw, Cincinnati, OH 45215. *Compact quantum group actions on C*-algebras.*

Let δ be an action of a compact quantum group G on a C*-algebra B. We give necessary and sufficient conditions for the simplicity of the crossed product $B \times_\delta G$ in terms of certain subspaces of spherical functions. (Received September 26, 2006)