Simplicity, bounded normal generation, and automatic continuity of groups of unitaries

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Abstract

I'll discuss a number of properties of the special unitary group of a C^*-algebra. Under standard regularity conditions, this group has local bounded normal generation, a unique polish group topology, and satisfies the invariant automatic continuity. Moreover, it can be used as a classifying invariant for simple C^*-algebras up to (anti)-isomorphism. This is joint work with Abhinav Chand.