1102-46-69 **Bogdan T. Udrea*** (budrea@illinois.edu), Department of Mathematics, UIUC, 1409 W. Green Street, Urbana, IL 61801, and **Marius Junge** and **Stephen Longfield**. *Some Rigidity Results for Generalized q-Gaussian Algebras.*

For any H, G countable discrete groups with H abelian and G acting on H by automorphisms, we define the generalized q-gaussian algebras $A \rtimes \Gamma_q(G,K)$, where $A = L(H)$ and K is an infinite dimensional separable Hilbert space. We then prove that if the pairs H, G and H', G' satisfy a certain "strong rigidity" assumption, the commutator subgroups $[G,G]$ and $[G',G']$ are ICC, the actions $G \curvearrowright A$, $G' \curvearrowright B$ are ergodic and G, G' belong to a fairly large class of groups (including all non-amenable groups with the Haagerup property) then $A \rtimes \Gamma_q(G,K) = B \rtimes \Gamma_q(G',K')$ implies that A and B are unitarily conjugate inside $M = A \rtimes \Gamma_q(G,K)$ and $\mathcal{R}_G \cong \mathcal{R}_{G'}$, where $\mathcal{R}_G$, $\mathcal{R}_{G'}$ are the countable, p.m.p. equivalence relations implemented by the actions of G and G' on A and B, respectively.

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