

## Approximation properties of $q$ -Araki-Woods algebras

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### Abstract

I will report on recent results about type III counterparts of  $q$ -Gaussian algebras – the  $q$ -Araki-Woods algebras. In the first part of the talk I will introduce the main tools : the Wick formula and the second quantisation. In the second half I plan to discuss the Haagerup property and complete metric approximation property, and outline the proofs. (This is joint work with Stephen Avsec and Michael Brannan.)