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Actions of quantum linear spaces on quantum algebras.

Some noncommutative algebras exhibit few classical symmetries. That is, their automorphism group is small and/or uninteresting. This leads us to study the quantum symmetry of such algebras, i.e. actions of Hopf algebras on them. Here, we classify linear actions of quantum linear spaces on quantum affine spaces and quantum matrix algebras, with auxiliary results for actions of quantum linear spaces on quantum exterior algebras, quantized Weyl algebras, and quantum general and special linear groups. (The topic of this talk is subject to change.) (Received September 15, 2020)