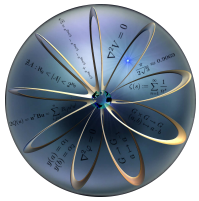

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finite quantum group

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Synonym	quantum group
Synonym	dual of a finite Hopf algebra
Related topic	CompactQuantumGroup
Related topic	HopfAlgebra
Related topic	GrassmanHopfAlgebrasAndTheirDualCoAlgebras
Related topic	CompactMatrixQuantumGroup
Defines	comultiplication in a quantum group
Defines	dual of a finite Hopf algebra

Definition 0.1. A finite quantum group Q_{Gf} is a pair $(\mathbb{H}, \Phi)$ of a finite-dimensional C^*-algebra $\mathbb{H}$ with a comultiplication Φ such that $(\mathbb{H}, \Phi)$ is a Hopf *-algebra.

Note that one obtains the dual Hopf algebra of a commutative, finite quantum group via Fourier transformation of the group's elements.

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