

## Some remarks on measures on orthogonal rational projections and the rational sphere

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### Abstract

We examine measures on the quantum logic of all projections with rational  $n \times n$ -matrices and on its sublogic generated by all projections onto one-dimensional subspaces in  $\mathbb{Q}^n$  passing through elements of the unit sphere in  $\mathbb{Q}^n$ .

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### Keywords

Gleason theorem, Measure, Projection, Quantum logic, Rational sphere