



# The Fuglede-Kadison determinant, theme and variations

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We review the definition of determinants for finite von Neumann algebras, due to Fuglede and Kadison (1952), and a generalisation for appropriate groups of invertible elements in Banach algebras, from a paper by Skandalis and the author (1984). After some reminder on K-theory and Whitehead torsion, we hint at the relevance of these determinants to the study of  $L^2$ -torsion in topology.

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