

# Motivation to K-theory of $C^*$ algebras via Atiyah Singer theorem and Fredholm operators

*vendredi 28 novembre 2025 16:00 (35 minutes)*

This talk will be structured as follows: the first will be quite historical, talking about operators on a Hilbert space, Fredholm operators, indices.. In the second one, we introduce the  $C^*$  algebraic K-theory framework and we relate it to the problem of Fredholm indices computation. If we have enough time, we look at a specific example illustrating which kind of link is arised by Atiyah Singer theorem.

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