

# Lacunary Fourier series for compact quantum groups

Monday October 19 – 17h05-17h50

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This talk is devoted to the study of Sidon sets and some related objects for compact quantum groups. We will introduce several generalizations of the notion of Sidon sets for compact quantum groups, and prove that any Sidon set is a  $\Lambda(p)$ -set. We also prove the existence of  $\Lambda(p)$ -sets for orthogonal systems for noncommutative  $L^p$ -spaces, and deduce the corresponding properties for compact quantum groups. Some basic properties of central Sidon sets are discussed and several examples are also studied.