

# Sexaquarks: Quarks uniting to form Dark Matter at LHCb

*Friday, 8 November 2024 12:20 (20 minutes)*

The sexaquark, a neutral, flavour singlet scalar uuddss bound state, is a hypothetical particle that may have a low enough mass to be stable or extremely long-lived. Therefore, this hadron could be a DM candidate. In this talk, I will present what we know so far about the sexaquark, based on theoretical findings and astrophysical and cosmological observations. Using this knowledge, different searches have been proposed of which a few interesting ones are currently being performed at LHCb.

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