

# **Synthetic Landau levels with atomic dysprosium**

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We present a realization of synthetic Landau levels using ultracold dysprosium atoms. We use the large electronic spin  $J = 8$  to encode a synthetic spatial dimension, along which motion is induced by laser couplings. An effective gauge field arises from the momentum imparted on the atoms upon laser-driven spin flips. We probe the main topological features of the lowest Landau levels: presence of propagating edge modes, quantification of the Hall conductance.