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Realizing Fractional Chern Insulators with Dipolar Spins NOR-
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Strongly correlated quantum systems can exhibit exotic behavior that is determined
and controlled by topology. Such topological systems are of interest because they
constitute fundamentally new states of matter exhibiting fractionalized excitations
and robust chiral edge modes. We theoretically predict that the nu = 1/2 frac-
tional Chern insulator, a recently proposed topological state of lattice bosons, arises
naturally in a two-dimensional array of driven, dipolar-interacting spins.

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