Abstract Submitted
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Exploring the Q-Ball Solution Space[1] ETHAN EDWARDS, CHRIS VERHAAREN, Brigham Young University — Q-balls, soliton solutions of certain scalar field theories, provide an interesting candidate for macroscopic dark matter. Gauged Q-balls are of particular interest since scalar and gauge field interactions limit their size. While researchers have found several types of soliton solutions, whether all have been discovered remains an open question. I introduce gauged Q-balls and related solitons, along with a process for determining all soliton types.

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