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## Multiple polaron quasiparticles with dipolar fermions in a bilayer

*Thursday 25 January 2024 16:50 (20 minutes)*

We study the impurity problem with dipolar Fermi atoms in a bilayer geometry. By evaluating the polaron spectrum, we disclose the appearance of a Rydberg-like series of attractive branches when the distance between the layers becomes smaller. We relate them to the appearance of newly bound molecular states by evaluating their orbital angular momentum component. We observe an interchange of orbital character between these states when the system parameters such as the gas density or the interlayer distance change.

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