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The observational signature of helical magnetic fields in parsec scale AGN jets ERIC BROWN, MAXIM LYUTIKOV, PREETI KHARB, Purdue University — While most jet formation models predict helical magnetic fields, their observational signature has yet to be confirmed. Observing how quantities change along the axis perpendicular to the jet flow may allow us to test the prediction of helical fields. We present calculations showing how the synchrotron intensity, fractional linear polarization, and spectral index to change across a jet with a helical magnetic field structure. These results are then compared with VLBI observations of resolved parsec scale jets.

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