Abstract Submitted
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Band geometry of higher Landau levels[1] RAHUL ROY, FENNER HARPER, THOMAS JACKSON, University of California, Los Angeles — A set of recent results have shown that the quantum geometry of bands as encoded in quantities such as the mean fluctuations of the Berry curvature and the quantum metric provide a useful way of analyzing the stability of FQHE phases in Chern bands. These quantum geometric quantities measure the closeness of Chern bands to the lowest Landau level. Here, we find a more complete set of criteria for the stability of FQHE phases which incorporate a distance measure to an arbitrary Landau level.

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