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**Extracting Excitations From Model State Entanglement** NICOLAS REGNAULT, ANTOINE STERDYNYIAK, Ecole Normale Supérieure, CNRS, ANDREI BERNEVIG, Princeton University — We extend the concept of entanglement spectrum from the geometrical to the particle bipartite partition. We apply this to several Fractional Quantum Hall wavefunctions on both sphere and torus geometries to show that this new type of entanglement spectra completely reveals the physics of bulk quasihole excitations. While this is easily understood when a local Hamiltonian for the model state exists, we show that the quasihole wavefunctions are encoded within the model state even when such a Hamiltonian is not known. As a nontrivial example, we look at Jain's composite fermion states and obtain their quasiholes directly from the model state wavefunction. We reach similar conclusions for wavefunctions described by Jack polynomials.

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