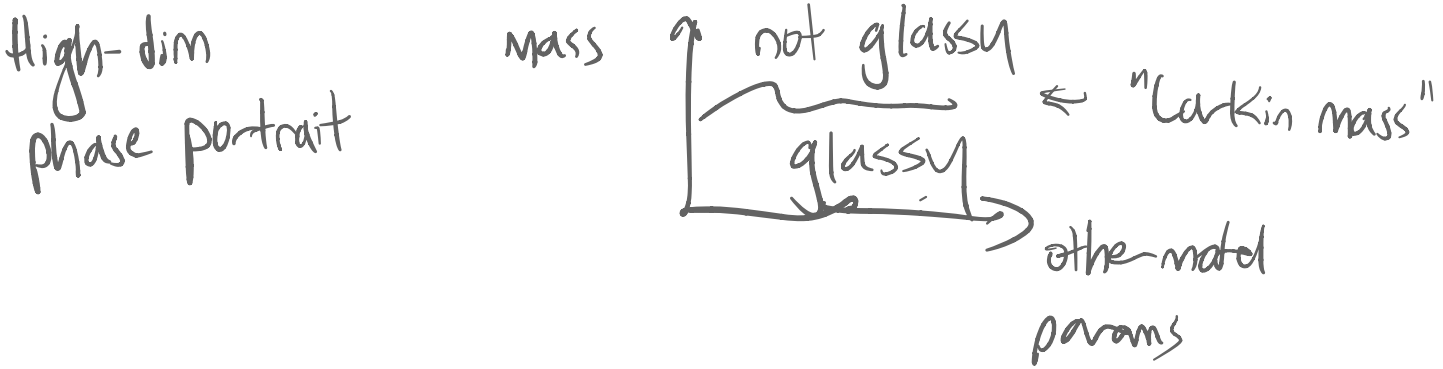
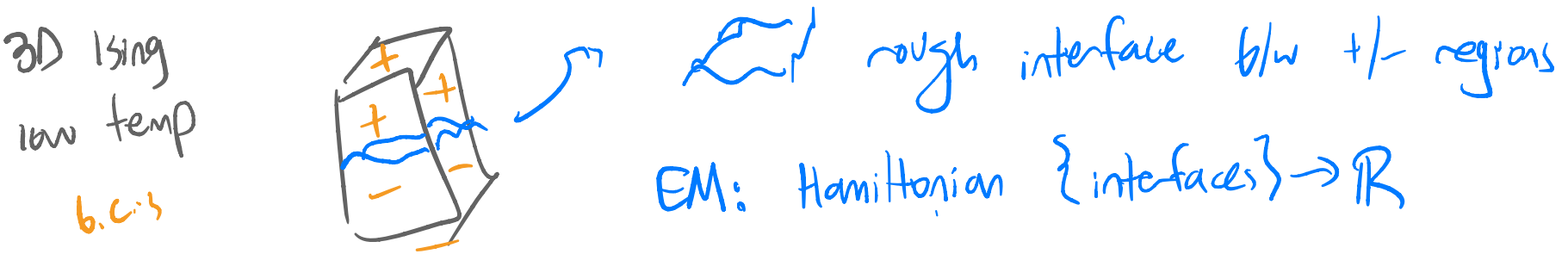
Landscape complexity of the elastic manifold (or, when does a random interface behave like a glass?)

- **Theorem** (Ben Arous–Bourgade–M., after Fyodorov–Le Doussal):



- ... for the "elastic manifold," some model of random interfaces like



- which is interesting for the competition between elasticity (promoting flatness), mass (pro. location near 0), and disorder (pro. ruggedness),
- and where "glassy" (= complex) means there are many *metastable states*, or interface config.s locally minimizing EM Hamiltonian.