Abstract: I will discuss a web of field theory dualities in 2+1 dimensions that generalize the familiar particle/vortex duality. Some of these dualities relate theories of fermions to theories of bosons. Others relate different theories of fermions. Assuming some of these dualities, other dualities can be derived. I will present several consistency checks of the dualities and relate them to electromagnetic dualities in 3+1 dimensions. I will mention several interesting applications of these dualities to various problems in condensed matter physics, including topological insulators, half-filled Landau levels, and deconfined criticality.