Modern Quantum Mechanics is 100 years old: why all the excitement today?

The laws of quantum mechanics were established during 1925-1932, and have not changed since. But just because we know the laws, we do not know all that they make possible. While the “first quantum revolution" was characterised by the Heisenberg uncertainty principle, some believe we are in a “second quantum revolution” characterized by “entanglement” . I will describe some surprise discoveries of “topological quantum matter” that may make topologically protected quantum computing” possible.