In 1943 the quantum physicist Erwin Schrödinger famously posed the question “What is Life?” to a rapt audience in a series of public lectures held at the Dublin Institute for Advanced Studies at Trinity College, Dublin. Over 70 years later we still do not have an answer to this question. In this talk, I explore our current understanding of the physics of life and what ‘new’ physics might be uncovered by a deeper understanding of living phenomena. One place such an understanding is especially critical is the origin of life, which remains one of the great open questions of science. I provide examples of the applicability of applying insights from physics to understanding how life first emerged, including discussion of how the origin of life may be characterizable as a phase transition between states of matter that has new and interesting properties.