

## Equations of Motion and Interpretations

### Pre-Lecture Reading/Post-Lecture Summary

Armed with the equations of motion describing free scalar, spinor and vector fields, we will start exploring their properties to try and get some understanding of why they take the forms that they do and also to gain some insight into what they are actually describing. Part of our analysis will be an accounting of expected degrees of freedom. We will find some expected results, but also some unexpected and quite surprising results including the prediction of antimatter. Then you will leave and be happy.