

Lectures 13, 14, 15, 16, 17, 18, 19

- Representations of the Lorentz group and spinors. Srednicki 33, 34, 35.
This may be a good time to study the representations of the Lorentz group in any d . See Polchinski “String theory” volume 2 appendix B and Freedman and van Proyen “Supergravity” chapter 3.
- Lagrangians for Weyl, Dirac and Majorana fields. Solutions of the Dirac equation. Canonical quantization of spin one-half fields. Srednicki 36, 37, 38, 39.
- Feynman rules for Dirac fields. Srednicki 41, 42, 45.
- Tree-level scattering processes in Yukawa theory. Srednicki 46, 47, 48.
- Fermionic path integral. Srednicki 43, 44.