

Week 8 (due May 28)

Reading: sections 73, 74.

1. BRST symmetry is a global symmetry of the gauged-fixed action and therefore, by Noether theorem, one can define the corresponding conserved current, known as the BRST current. Find the BRST current in the case of the Lorenz gauge.
2. Compute the current corresponding to the ghost number symmetry (in the Lorenz gauge).
3. Problem 74.1 in Srednicky.