Quantum Field Theory II, Exercise Set ♯ 8.

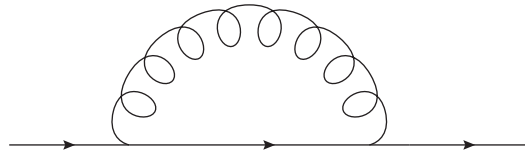**1.**

Calculate $Z_\psi^{(1)}$ and $Z_m^{(1)}$ in general $(\alpha \neq 1)$ covariang gauge from the diagram

2.

Calculate the part of the pole contribution to the 1-loop fermion-vector vertex due to