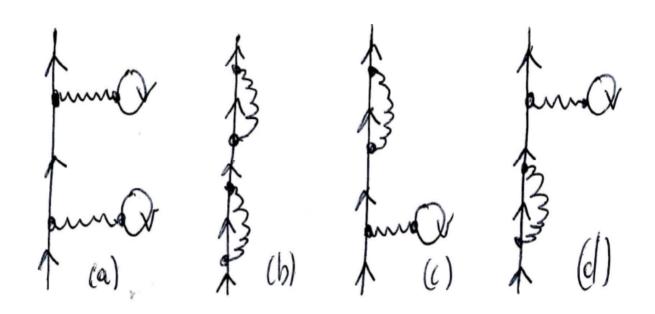
Homework 3 second-cycle degree in Physics (5 May 2020)

Second-order Feynman diagrams for the Green's function:

- (a) write the *analytic* expressions associated with diagrams (a), (b), and (c) in *coordinate* space;
- (b) show that (c) and (d) are distinct diagrams;
- (c) write the *analytic* expressions associated with diagram (c) in *momentum* space.



deadline: 15 May 2020

N.B. deliver the **solution** by sending (<u>psil@pd.infn.it</u>) a **file** denoted as **SURNAME-Name_3.pdf** (<u>PDF format only !</u>), ex.: SMITH-John_3.pdf.