

COMPUTING METHODS IN HEP **Exercise 1** **Spring 2026**
(To be returned by 10:15 on Friday 23.1.)

1. **Create a git repository** for this course by forking the repo

<https://github.com/slehti/CompInHEP2026>

Commit all your answers into your git repo under

CompInHEP2026/Exercises/Ex< n >/returned_answers/< yourname >.

Never commit data in your repo, or it will get too big. Please make sure that we have permission to access your repo.

Please give me instructions by email to sami.lehti(at)cern.ch how to access your git repository.

2. **Create a LaTeX document** which contains Feynman graphs for the lowest order contributions to electron-positron annihilation (Fig.1.8 in Ref [1]). Place the two figures in parallel, and use a joint caption below the figures. Add reference using BibTeX.

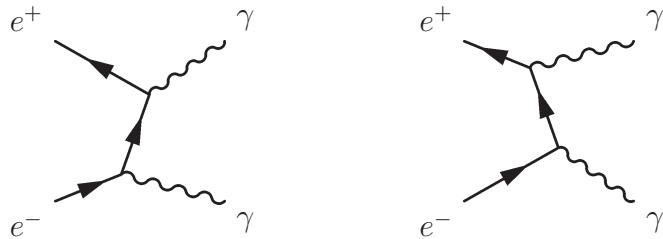


Figure 1: Feynman graphs for the lowest order contributions to electron-positron annihilation [1].

3. **Write a Makefile** which produces a pdf file from the source files used in 2.

References

- [1] B.R. Martin and G. Shaw. Particle physics. *John Wiley & Sons, 1992.*