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In the final state. In the muon case, the counting rate should be high enough to allow this experiment to be performed with electron-positron storage rings of the next generation.

**Nuclei as generators of quasi-real photons**

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**Abstract.** — An equivalent photon approximation is tested for the inelastic scattering of high-energy non-hadronic particles (leptons and photons) in the electromagnetic field of nuclei. Coherent, incoherent elastic and incoherent inelastic contributions are included. As for the coherent (Coulomb) term, various nuclei \( \{^{235}\text{U}, ^{59}\text{Co}, ^{12}\text{C}\} \) with different types of form factors are considered. Four processes are considered: 

a) photoproduction of muon pairs

b) muon bremsstrahlung

c) muon trident production (term with the time-like photon only)

d) neutrino production of a vector boson.

The comparison of the approximation with the exact calculation is made for \( d\sigma/dW \), where \( W \) is the invariant mass of the nonhadronic system produced. The approximation works well in general. As an application, we show the full calculation of the muon trident process (except for the correction due to the Pauli principle).