

Dr. Oleksandr Tomalak
Johannes Gutenberg University Mainz, Germany

Title

Status and prospects of radiative corrections in elastic electron-proton scattering

Abstract

I am going to discuss the current status of radiative corrections in elastic electron-proton scattering at low energies. I start with the well-known one-loop QED corrections. Afterwards, I present the recent work on the two-photon exchange, which is the main source of the theoretical uncertainty. I discuss developments and prospects in studies of one and multiple-photon bremsstrahlung. Moreover, I talk about the Möller scattering as the luminosity-normalization process.