

## Bremsstrahlung accompanied $\alpha$ -decay $^{210}\text{Po}$

A high-statistics measurement of bremsstrahlung emitted in the alpha-decay of  $^{210}\text{Po}$  has been performed. The measured differential emission probabilities are in good agreement with our theoretical results obtained within the quasiclassical approximation as well as with an exact quantum mechanical treatment. Due to the small effective electric dipole charge of the radiating system, a significant interference between the electric dipole and quadrupole contributions occurs, altering substantially the angular correlation between the alpha particle and the emitted photon.

**Primary author:** Dr SCHEIT, Heiko (Max-Planck-Institut fuer Kernphysik (MPI))

**Presenter:** Dr SCHEIT, Heiko (Max-Planck-Institut fuer Kernphysik (MPI))