

Mattias Marklund:

Title: Strong field QED effects in laser-matter interactions

Abstract: The evolution of laser systems has given us the opportunity to probe previously uncharted domains on the map of physics. Here, I will give an overview of the current and future possibilities to do high-field physics using laser sources. In particular, I will focus on some of the more prominent QED processes that may occur under such extreme conditions. Furthermore, a brief discussion concerning the possibility to probe new physics will also be given.