



Contribution ID: 41

Type: **oral presentation**

## **Radiation reaction in QED: perturbative and non-perturbative approaches.**

*Thursday, 11 July 2013 11:00 (20 minutes)*

I will discuss recent theoretical results in radiation reaction (RR). In the first part of the talk I will describe how and where RR appears in QED, and the possibilities for measuring RR in different regimes and in different experiments (with say lasers, or Coulomb fields).

RR effects are expected to become significant in the regimes reached by next generation laser facilities. Aside from a few exact solutions, there are though few nonperturbative treatments of RR available. In the second part of the talk I will describe a new non-perturbative approach to QED in strong background fields, called 'basis lightfront quantisation'.

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**Session Classification:** Radiation reaction