

ICFA Mini-Workshop on Beam-Beam Effects in Hadron Colliders (BB2013)



Monday 18 March 2013 - Friday 22 March 2013

CERN

Scientific Programme

Beam-beam experience in hadron colliders

Beam-beam effects in hadron colliders

Beam-beam experience in lepton colliders

Beam-beam effects in lepton colliders

Single Particle Effects I - head-on beam-beam effects

Incoherent beam-beam effects from head-on collisions with and without crossing angle

Single Particle Effects II - parasitic beam-beam effects

Incoherent beam-beam effects from parasitic and long range interactions

Beam-beam compensation schemes

Compensation of head-on and long range beam-beam effects, coherent and incoherent

Strong-strong beam-beam effects

Strong-strong beam-beam interactions, self-consistent models and coherent effects

Theory and simulations

Beam-beam models, analytical and simulation models, single particle and multiparticle simulations

Operational aspects of beam-beam effects

Operational considerations for colliders with strong beam-beam effects (PACMAN, missing collisions, luminosity levelling, ..)

Studies for future Projects

Studies required for future projects (HL-LHC, LHeC, ..)