The LHC / LC Study Group

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Web page: `www.ippp.dur.ac.uk/~georg/lhclc`

LHC / LC Study Group

The aim of the LHC / LC Study Group is to investigate how analyses at the LHC could profit from results obtained at a LC and vice versa. It is furthermore studied how informations obtained at both machines can most effectively be put together in order to explore the mechanism of electroweak symmetry breaking, the underlying structure of SUSY theories, etc.

Aim: investigate how analyses at the LHC could profit from results obtained at a LC and vice versa;

try to get Tevatron involved as well

- New initiative, working group is still forming

  Currently about 100 working group members from ATLAS, CMS, LC working groups, theory

- Working group coordination:

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- First meeting:

  St. Malo, April 12–15, 2002

- Long term goal ($\sim$ 1 year):

  Working group report

Many things to do, help needed!

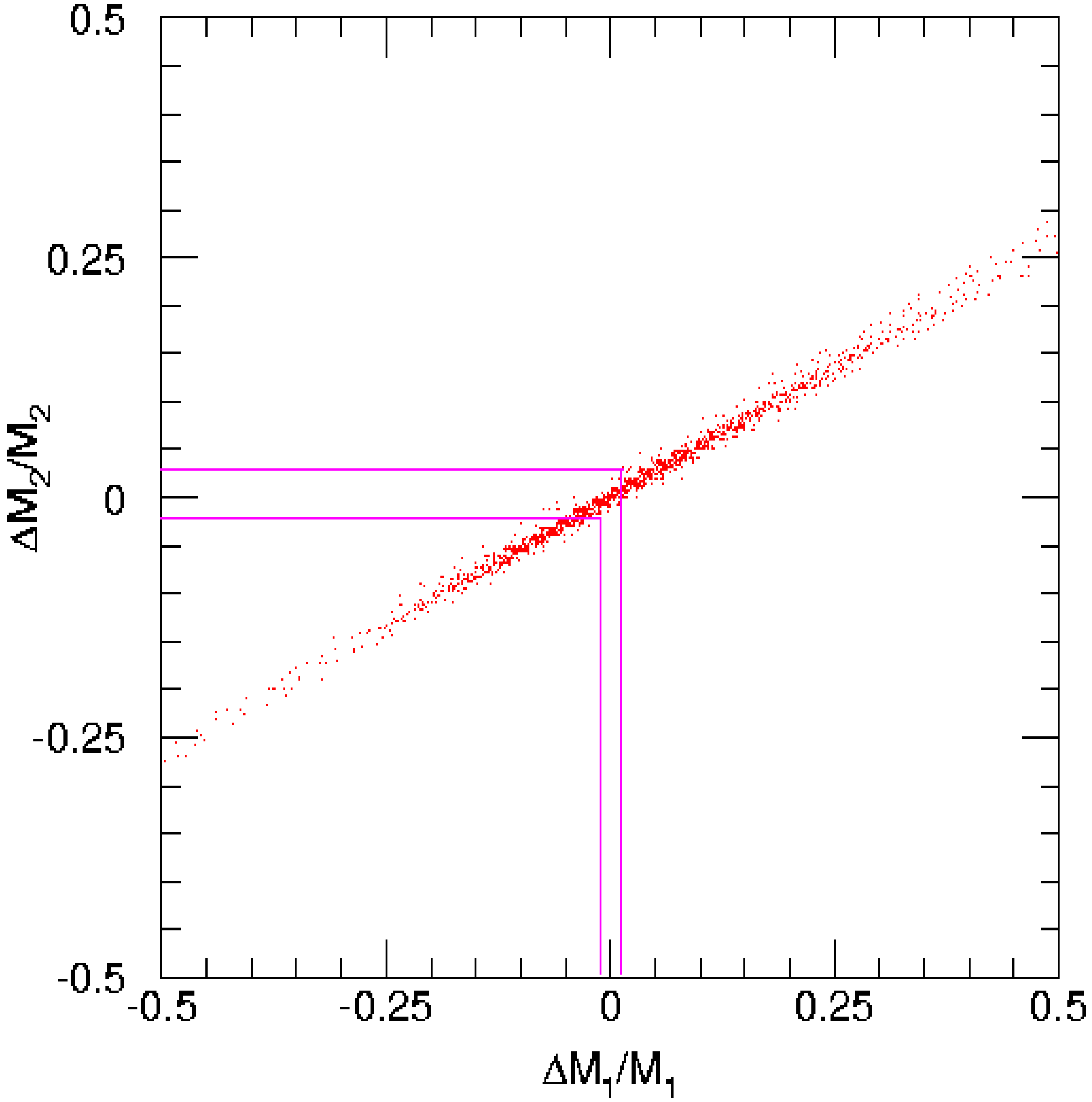
Topics under study in SUSY, Higgs, electroweak physics, alternative theories

E.g.: Improvement of LHC analyses (e.g. of cascade decays) including input on masses and BR's from the LC?

Simplest example: LC measurement of LSP mass

Determination of $m_{\tilde{\chi}_2}$:

[*ATLAS TDR*]



$\Rightarrow$ LC accuracy on $m_{\tilde{\chi}_1}$ yields drastic improvements