

FALC

Funding Agencies for Large Colliders

We will soon enter the era of The Fermi energy scale

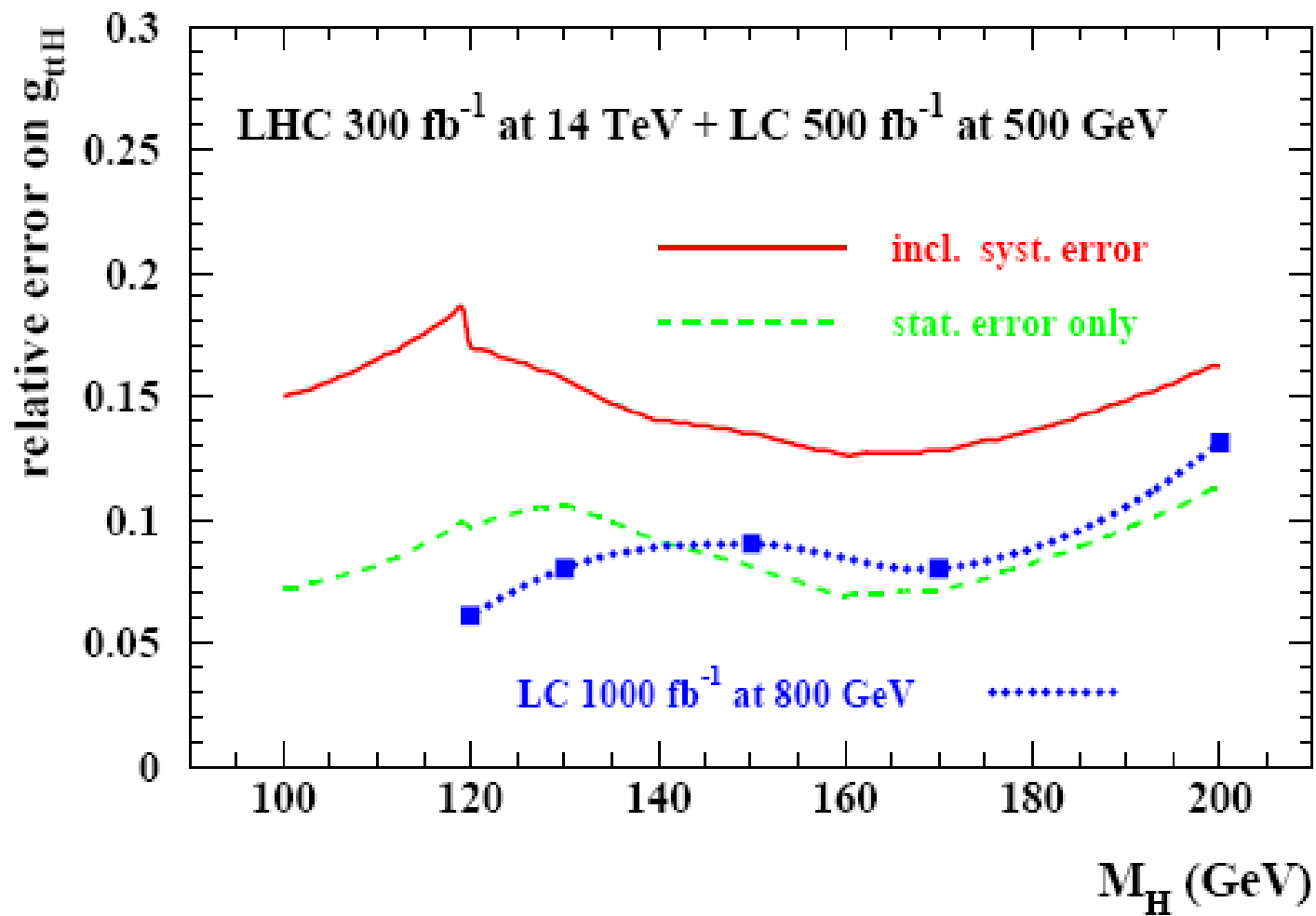
- The origin of mass
 - the Higgs paradigm
- The ratio between the Fermi scale and the Planck scale
 - A supersymmetric world
 - Extra dimensions
 - New strong interactions
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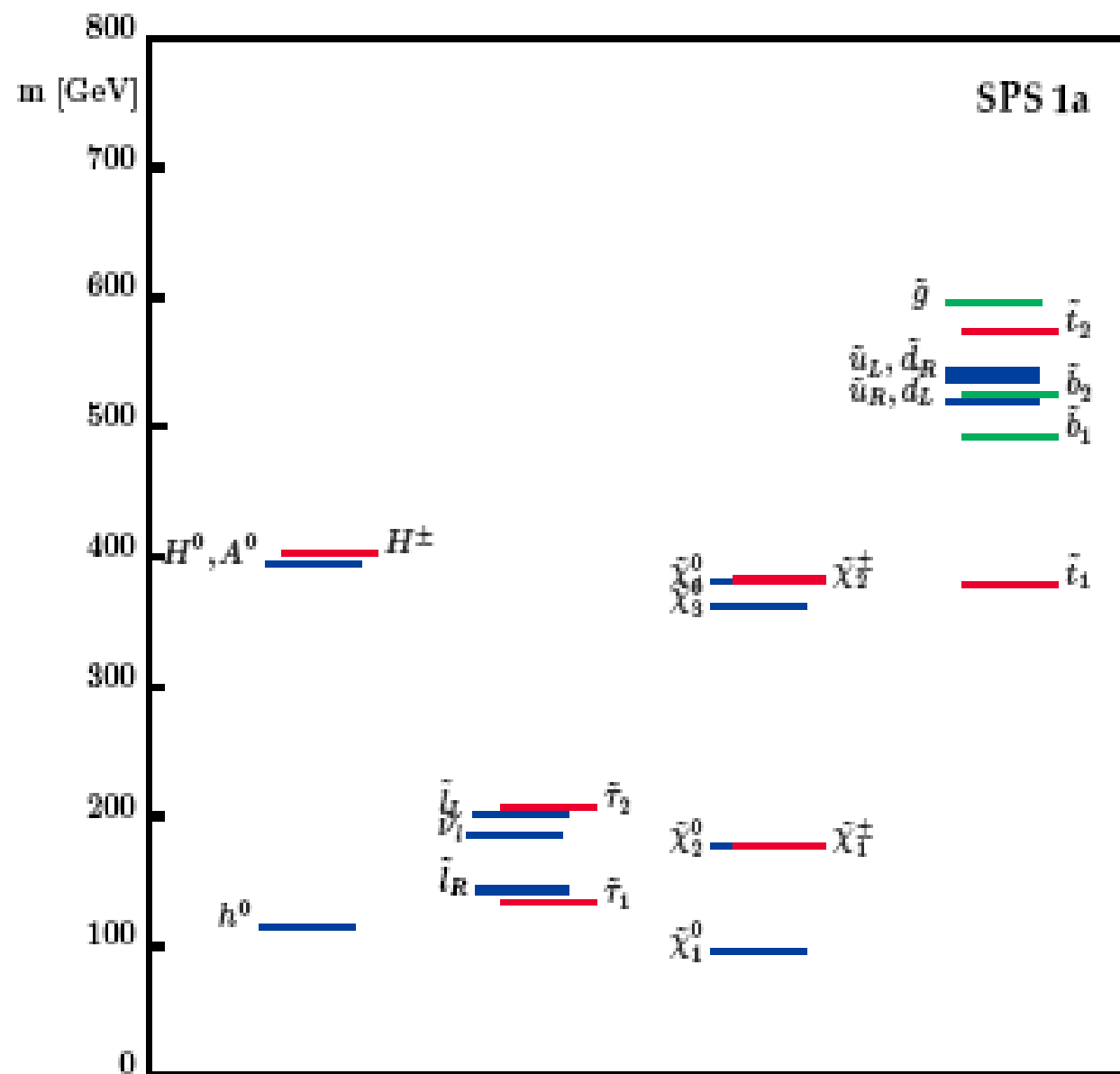
Energy scales and accelerators

- Many machines were crucial to explore the SM landscape:
 - Adone, Spear, Hera, SPS, P-Pbar collider, Tevatron, LEP, b-factories
 - Strong interactions, Flavour content of the SM, new Gauge Bosons, CP violation

The new scale needs a few machines

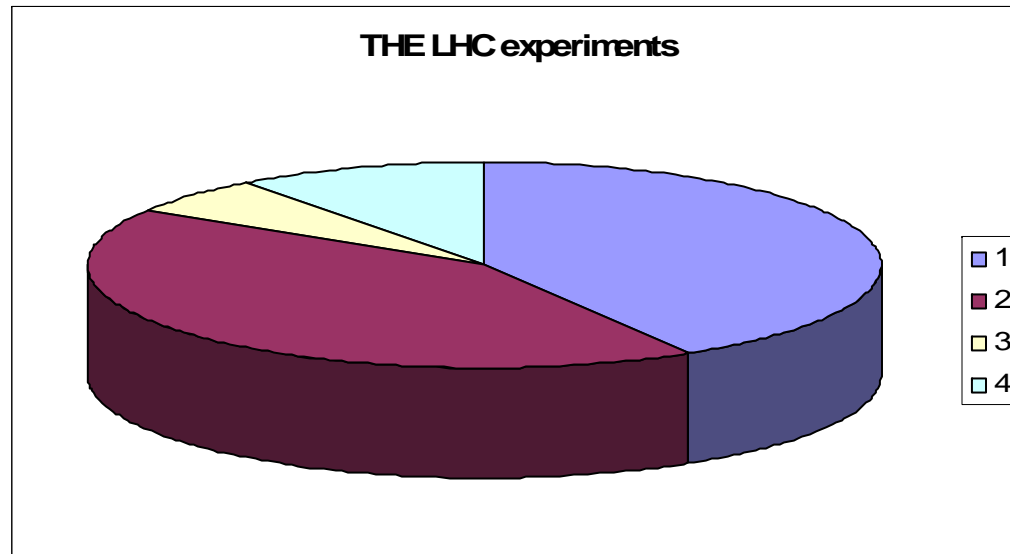
- To locate the energy scale
 - To identify new particles
 - To inspect their interactions
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- LHC, ILC, JPARK, SLHC, DLHC, CLIC, neutrino factories, flavour factories



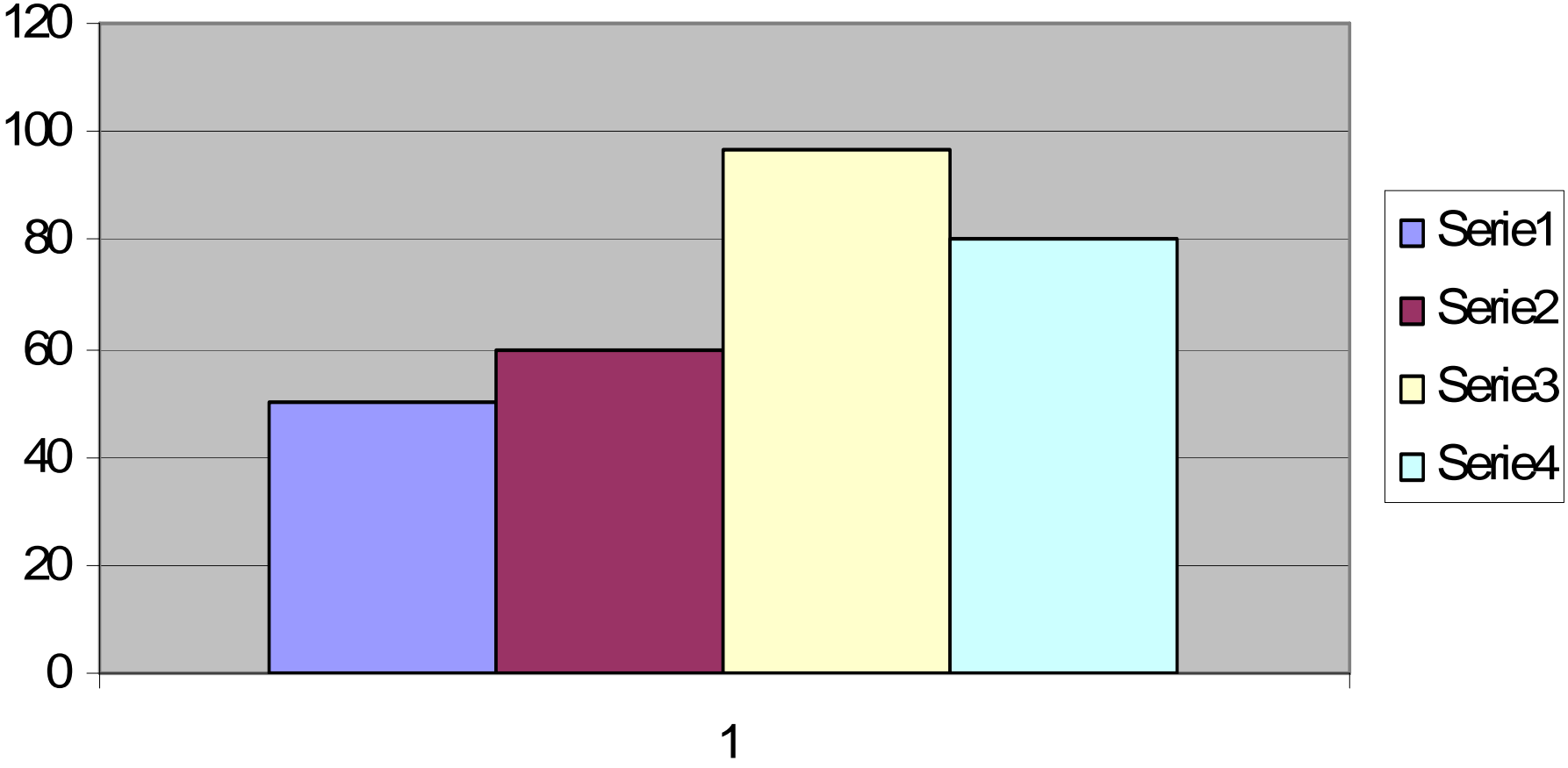


	LHC	LC	LHC+LC	SPS1a
$\tan \beta$	10.22±9.1	10.26±0.3	10.06±0.2	10
M_1	102.45±5.3	102.32±0.1	102.23±0.1	102.2
M_2	191.8±7.3	192.52±0.7	191.79±0.2	191.8
M_3	578.67±15	fixed 500	588.05±11	589.4
$M_{\tilde{\tau}_L}$	fixed 500	197.68±1.2	199.25±1.1	197.8
$M_{\tilde{\tau}_R}$	129.03±6.9	135.66±0.3	133.35±0.6	135.5
$M_{\tilde{\mu}_L}$	198.7±5.1	198.7±0.5	198.7±0.5	198.7
$M_{\tilde{\mu}_R}$	138.2±5.0	138.2±0.2	138.2±0.2	138.2
$M_{\tilde{e}_L}$	198.7±5.1	198.7±0.2	198.7±0.2	198.7
$M_{\tilde{e}_R}$	138.2±5.0	138.2±0.05	138.2±0.05	138.2
$M_{\tilde{q}^3_L}$	498.3±110	497.6±4.4	521.9±39	501.3
$M_{\tilde{t}_R}$	fixed 500	420±2.1	411.73±12	420.2
$M_{\tilde{b}_R}$	522.26±113	fixed 500	504.35±61	525.6
$M_{\tilde{q}^2_L}$	550.72±13	fixed 500	553.31±5.5	553.7
$M_{\tilde{c}_R}$	529.02±20	fixed 500	531.70±15	532.1
$M_{\tilde{s}_R}$	526.21±20	fixed 500	528.90±15	529.3
$M_{\tilde{q}^1_L}$	550.72±13	fixed 500	553.32±6.5	553.7
$M_{\tilde{u}_R}$	528.91±20	fixed 500	531.70±15	532.1
$M_{\tilde{d}_R}$	526.2±20	fixed 500	528.90±15	529.3
A_τ	fixed 0	-202.4±89.5	352.1±171	-253.5
A_t	-507.8±91	-501.95±2.7	-505.24±3.3	-504.9
A_b	-784.7±35603	fixed 0	-977±12467	-799.4
m_A	fixed 500	399.1±0.9	399.1±0.8	399.1
μ	345.21±7.3	344.34±2.3	344.36±1.0	344.3

A global example



eurpean percentage



AIMS of FALC

To encourage a sharing of the plannings and to become a forum for cooperation among funding agencies on global infrastructures

To promote a forum for the knowledge of the applications of technologies related to global projects

To coordinate R&D programmes for existing, forthcoming and future projects

To issue a public annual report sent to governments including a scientific ICFA report

composition

- FALC now includes representatives from the three regions:
 - AMERICA
 - Canada(NRC) and US(DOE, NSF),
 - EUROPE
 - CERN(DG and the Council president), France(IN2P3/CEA), Germany (BMBF),Italy(INFN),United Kingdom(PPARC),
 - ASIA
 - Japan(MEXT), Korea (MOST), India, China
- Also attend the Chairs of ICFA and of ILCSC
- Started in 2003 and met nine times
- Next meeting in Rome, Jul. 11

organization

- **The resource group:** a strong link with the balance of offers and demands of resources that makes propositions to FALC for support and coordination.
 - Establishment of a “common fund” for the GDE headquarters activities.

organization

- **The governance subgroup:**
prepares the discussion on the forthcoming actions of FALC.

ILC specific short term actions

- Supports the evaluation of the RDR from a referee panel nominated by ILCSC with some names suggested by FALC
- Concentrates on the efforts needed to match the TDR phase and welcomes receiving a detailed planning by the GDE by the July meeting
- Evaluates those effort in the context of the whole R&D effort on global infrastructures

Conclusions

- FALC is defining better his role
- ILC scores another milestone, after the technology choice
- Concurrency with LHC and a technology choice imply a window of opportunity for ILC
- Find value for the R&D phase
- Be ready for the boost from the LHC results...