Flavour in the era of the LHC, 3rd meeting

Report of Contributions

WG1 report

Contribution ID: 0 Type: not specified

WG1 report

Wednesday 17 May 2006 14:00 (45 minutes)

Presenter: POROD, Werner

Session Classification: WG reports

WG2 report

Contribution ID: 1 Type: not specified

WG2 report

Wednesday 17 May 2006 14:45 (45 minutes)

Presenter: F. MUHEIM, G. BUCHALLA

Session Classification: WG reports

WG3 report

Contribution ID: 2 Type: not specified

WG3 report

Wednesday 17 May 2006 15:30 (45 minutes)

Presenters: VAN DER SCHAAF, Andries (Zurich University); RAIDAL, Martti (NICPB, Tallinn)

Session Classification: WG reports

Contribution ID: 3 Type: not specified

Conclusions

Wednesday 17 May 2006 16:15 (10 minutes)

o Plans for the Final Report o 4th meeting: October 9-10-11

Session Classification: WG reports

LHCb

Contribution ID: 4 Type: **not specified**

LHCb

Presenter: NAKADA, Tatsuya

SuperBelle

Contribution ID: 5 Type: **not specified**

SuperBelle

Presenter: YAMAUCHI, Masanori

Contribution ID: 6 Type: not specified

Linear Super B factory

Presenter: GIORGI, Marcello

Discussion

Contribution ID: 7 Type: **not specified**

Discussion

Discussion

Contribution ID: 8 Type: **not specified**

Discussion

Discussion

Contribution ID: 9 Type: **not specified**

Discussion

Contribution ID: 11 Type: not specified

Probing new Physics through Lepton Universality

I discuss the lepton universality in the pi->l nu, K->l nu and B->l nu modes and also other promising channels (hadronic and leptonic tau decays....that are part of the content of a work in progress) where to perform such a lepton universality test. Particular emphasys is given to explain the naturalness of the new physics framework (as discussed in my last work hep-ph/0605012) where such a violation of the lepton universality can appear, specially in the light of the recent Belle (B->tau nu) and CDF (Delta M_s) results.

Presenter: PARADISI, Paride (Rome 2)

Contribution ID: 12 Type: not specified

Probing new Physics through Lepton Universality

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(hadronic and leptonic tau decays....that are part of the content of a work in progress) where to perform such a lepton universality test. Particular emphasys is given to explain the naturalness of the new physics framework (as discussed in my last work hep-ph/0605012) where such a violation of the lepton universality can appear, specially in the light of the recent Belle (B-tau nu) and CDF (Delta M_s) results.

Contribution ID: 13 Type: not specified

Test of lepton universality in Upsilon decays: searching for a light Higgs boson

Monday 15 May 2006 14:30 (30 minutes)

Presenter: SANCHIS-LOZANO, Miguel-Angel (Valencia)

Session Classification: WG3, Monday afternoon

Contribution ID: 14 Type: not specified

Test of lepton universality in tau decay

Monday 15 May 2006 16:00 (30 minutes)

Tests of lepton universality based on the latest measurements by Babar and Belle of the tau mass and lifetime are discussed.

Presenter: IGONKINA, Olga (Oregon)

Session Classification: WG3, Monday afternoon

Contribution ID: 16 Type: not specified

Update on the status of MEG

Monday 15 May 2006 11:30 (30 minutes)

Detectors are getting ready and MEG will start data taking this year. The current status and prospects will be presented.

Presenter: NISHIGUCHI, Hajime (ICEPP, Tokyo)

Session Classification: WG3, Monday morning

Contribution ID: 17 Type: not specified

Final result of the SINDRUM II search for mu-e Conversion

Monday 15 May 2006 12:00 (30 minutes)

hundred fold improvement of the sensitivity on a heavy target

Presenter: BERTL, Wilhelm (PSI, Villigen)

Session Classification: WG3, Monday morning

Contribution ID: 18 Type: not specified

Two new pi->enu experiments

Monday 15 May 2006 16:30 (30 minutes)

In the past few months proposals for improved measurements of the pi->e+nu / pi->mu+nu branching ratio have been approved at TRIUMF and PSI. Details will be presented.

Presenter: VAN DER SCHAAF, Andries (Zurich)

Session Classification: WG3, Monday afternoon

Contribution ID: 19 Type: not specified

Probing new Physics through Lepton Universality

I discuss the lepton universality in the pi->l nu, K->l nu and B->l nu modes and also other promising channels (hadronic and leptonic tau decays....that are part of the content of a work in progress) where to perform such a lepton universality test. Particular emphasys is given to explain the naturalness of the new physics framework (as discussed in hep-ph/0605012) where such a violation of the lepton universality can appear, especially in the light of the recent Belle (B->tau nu) and CDF (Delta M_s) results.

Contribution ID: 20 Type: not specified

Probing new Physics through Lepton Universality

I discuss the lepton universality in the pi->l nu, K->l nu and B->l nu modes and other promising channels (hadronic and leptonic tau decays....that are part of the content of a work in progress) where to perform such a lepton universality test.

Particular emphasys is given to explain the naturalness of the new physics framework (as discussed in hep-ph/0605012) where such a violation of the lepton universality can appear, especially in the light of the recent Belle (B->tau nu) and CDF (Delta M_s) results.

Contribution ID: 21 Type: not specified

Probing new Physics through Lepton Universality

Monday 15 May 2006 14:00 (30 minutes)

I discuss the lepton universality in M->l nu (with M = pi, K, B) and in hadronic and leptonic tau decays as a tool to probe New Physics.

Presenter: PARADISI, Paride (Rome 2)

Session Classification: WG3, Monday afternoon

Contribution ID: 22 Type: not specified

The muon g-2 experiment

Monday 15 May 2006 17:00 (30 minutes)

I will give an overview of the status of the muon g-2 upgrade, the goals and prospects.

Presenter: SEMERTZIDIS, Yannis (BNL)

Session Classification: WG3, Monday afternoon

Contribution ID: 23 Type: not specified

The deuteron EDM

Tuesday 16 May 2006 11:30 (30 minutes)

recent developments

Presenter: SEMERTZIDIS, Yannis (BNL)

Session Classification: WG3, Tuesday morning

Contribution ID: 24 Type: not specified

The neutron EDM experiment at ILL

Tuesday 16 May 2006 11:00 (30 minutes)

Presenter: HARRIS, Philip (Sussex)

Session Classification: WG3, Tuesday morning

Contribution ID: 25 Type: not specified

Flavor mixing and EDMs in the SUSY models

Tuesday 16 May 2006 10:00 (30 minutes)

Presenter: HISANO, Junji (ICRR, Tokyo)

Session Classification: WG3, Tuesday morning

Contribution ID: 26 Type: not specified

Gauge and Yukawa mediated SUSY breaking in the triplet seesaw

Tuesday 16 May 2006 09:00 (30 minutes)

I discuss a novel and very predictive supersymmetric GUT scenario where the exchange of SU(2)_L triplet generates both neutrino masses and soft SUSY breaking terms. The phenomenological viability and experimental signatures are discussed.

Presenter: ROSSI, Anna (Padova)

Session Classification: WG3, Tuesday morning

Contribution ID: 27 Type: not specified

LFV and theta_13 in SUSY Seesaw

Tuesday 16 May 2006 09:30 (30 minutes)

We discuss the impact of neutrino masses and mixings on LFV processes within the context of the SUSY Seesaw, where the CMSSM is extended by 3 right-handed (s)neutrinos. We focus on the sensitivity of tau and muon LFV decays on the most relevant parameters. Compatibility with neutrino data, LFV and EDM bounds, and requiring successful baryogensis via thermal leptogenesis leads to strong constraints on the Seesaw parameters, for the studied SUSY benchmark points. We particularly emphasise the interesting relation between theta_13 and LFV muon decays.

Presenter: ANTUSCH, Stefan (Madrid)

Session Classification: WG3, Tuesday morning

Contribution ID: 28 Type: not specified

Flavour matters in leptogenesis

Wednesday 17 May 2006 09:00 (30 minutes)

Presenter: DAVIDSON, Sacha (Lyon)

Session Classification: WG3, Wednesday morning

B-> Xs gamma

Contribution ID: 29 Type: not specified

B-> Xs gamma

Monday 15 May 2006 09:00 (20 minutes)

Presenter: HAISCH, U.

Session Classification: WG2, Monday morning

Contribution ID: 30 Type: not specified

LHCb radiative penguin

Monday 15 May 2006 09:25 (20 minutes)

Presenter: BELYAEV, Ivan (Syracuse)

Session Classification: WG2, Monday morning

Belle B-> tau nu

Contribution ID: 31 Type: not specified

Belle B-> tau nu

Monday 15 May 2006 09:50 (20 minutes)

Presenter: IIJIMA, T.

Session Classification: WG2, Monday morning

B-> (D) tau nu in MSSM

Contribution ID: 32 Type: not specified

B-> (D) tau nu in MSSM

Monday 15 May 2006 10:15 (20 minutes)

Presenter: OKADA, Y.

Session Classification: WG2, Monday morning

Contribution ID: 33 Type: not specified

Babar B-> s nu nu and B-> l nu

Monday 15 May 2006 10:40 (20 minutes)

Presenter: ROBERTSON, S.

Session Classification: WG2, Monday morning

Contribution ID: 34 Type: not specified

New Physics benchmarks

Monday 15 May 2006 11:30 (20 minutes)

Presenter: ISIDORI, G.

Session Classification: WG2, Monday morning

Contribution ID: 35 Type: not specified

Particle Mixing and CPV in Little Higgs Models

Monday 15 May 2006 12:00 (20 minutes)

Presenter: A. BURAS AND C. TARANTINO

Session Classification: WG2, Monday morning

 $(WG1/WG2\ joint\ session)$

Contribution ID: 36 Type: not specified

(WG1/WG2 joint session)

Flavour in the e $\,\cdots\,$ / Report of Contributions

B->K*ll in SCET

Contribution ID: 37 Type: not specified

B->K*II in SCET

Monday 15 May 2006 15:30 (20 minutes)

Presenter: ZHU, G.

Session Classification: WG2, Monday afternoon

Contribution ID: 38 Type: not specified

Electromagnetic logs in b->sll

Monday 15 May 2006 15:55 (20 minutes)

Presenter: HUBER, T.

Session Classification: WG2, Monday afternoon

Contribution ID: 39 Type: not specified

[by phone] b->sll / experiment

Monday 15 May 2006 16:20 (20 minutes)

Presenter: BERRYHILL, J.

Session Classification: WG2, Monday afternoon

Contribution ID: 40 Type: not specified

Detecting Higgs bosons with muons in supergravity unified models

Monday 15 May 2006 17:15 (20 minutes)

Presenter: KAO, C.

Session Classification: WG2, Monday afternoon

Contribution ID: 41 Type: not specified

exp. results on B-> mumu

Monday 15 May 2006 17:40 (20 minutes)

Presenter: LIN, C.-J.

Session Classification: WG2, Monday afternoon

Contribution ID: 42 Type: not specified

B-> mumu in SUSY

Monday 15 May 2006 18:05 (20 minutes)

Presenter: DEDES, A.

Session Classification: WG2, Monday afternoon

Contribution ID: 43 Type: not specified

D0 Delta M_s measurement

Tuesday 16 May 2006 09:00 (20 minutes)

Presenter: BORISSOV, G.

Session Classification: WG2, Tuesday morning

Contribution ID: 44 Type: **not specified**

CDF Delta M_s measurement

Tuesday 16 May 2006 09:25 (20 minutes)

Presenter: DE CECCO, S.

Session Classification: WG2, Tuesday morning

Contribution ID: 45 Type: **not specified**

DeltaGamma_Bs new results

Tuesday 16 May 2006 09:50 (17 minutes)

Presenter: LENZ, A.

Session Classification: WG2, Tuesday morning

Contribution ID: 46 Type: not specified

Delta M_s and SUSY

Tuesday 16 May 2006 10:10 (20 minutes)

Presenter: GUADAGNOLI, D.

Session Classification: WG2, Tuesday morning

Contribution ID: 47 Type: **not specified**

UTfit and Delta M_s

Tuesday 16 May 2006 11:00 (10 minutes)

Presenter: BONA, M.

Session Classification: WG2, Tuesday morning

Contribution ID: 48 Type: **not specified**

CKMfitter and Delta M_s

Tuesday 16 May 2006 11:10 (10 minutes)

Presenter: T'JAMPENS, S.

Session Classification: WG2, Tuesday morning

Contribution ID: 49 Type: not specified

New Physics in Bs mixing

Tuesday 16 May 2006 11:20 (20 minutes)

Presenter: BALL, P.

Session Classification: WG2, Tuesday morning

Contribution ID: 50 Type: not specified

discussion on Delta M_s

Tuesday 16 May 2006 11:40 (25 minutes)

Presenter: , all speakers on Bs-Bsbar mixing

Session Classification: WG2, Tuesday morning

Contribution ID: 51 Type: not specified

SUSY in K decays

Tuesday 16 May 2006 12:05 (20 minutes)

Presenter: SMITH, C.

Session Classification: WG2, Tuesday morning

Contribution ID: 52 Type: not specified

B-> VV decays can be useful

Wednesday 17 May 2006 09:00 (20 minutes)

Presenter: BENEKE, M.

Session Classification: WG2, Wednesday morning

Contribution ID: 53 Type: not specified

Lambda_b -> Lambda V

Wednesday 17 May 2006 09:25 (17 minutes)

Presenter: CONTE, E.

Session Classification: WG2, Wednesday morning

Contribution ID: 54 Type: **not specified**

alpha extraction from Bd to pi pi decays

Wednesday 17 May 2006 09:45 (17 minutes)

Presenter: VYSOTSKY, M.

Session Classification: WG2, Wednesday morning

Contribution ID: 55 Type: not specified

B->rho pi, rho rho at LHCb

Wednesday 17 May 2006 10:05 (20 minutes)

Presenter: DESCHAMPS, O.

Session Classification: WG2, Wednesday morning

Contribution ID: 56 Type: not specified

B->rho rho isospin analysis/summary of alpha determination

Wednesday 17 May 2006 10:55 (20 minutes)

Presenter: BONA, M.

Session Classification: WG2, Wednesday morning

Contribution ID: 57 Type: not specified

Gamma extraction with 4-body D decays in B->DK

Wednesday 17 May 2006 11:20 (17 minutes)

Presenter: RADEMACKER, J.

Session Classification: WG2, Wednesday morning

Contribution ID: 58 Type: not specified

Turkic Accelerator Complex (TAC)

Wednesday 17 May 2006 11:40 (20 minutes)

Presenter: SULTANSOY, S.

Session Classification: WG2, Wednesday morning

Status of BES

Contribution ID: 59 Type: not specified

Status of BES

Wednesday 17 May 2006 12:05 (20 minutes)

Presenter: ASNER, D.

Session Classification: WG2, Wednesday morning

Contribution ID: 60 Type: not specified

Hadronisation in BNV SUSY Decays

Presenter: SKANDS, Peter

Contribution ID: 61 Type: not specified

SUSY-CKM matrix determinations in SUSY electroweak processes at the LHC

Wednesday 17 May 2006 09:30 (20 minutes)

Presenter: FUKS, Benjamin

Session Classification: WG1, Wednesday morning

Contribution ID: **62** Type: **not specified**

H->bs and b->sgamma in the MSSM with NMFV: FeynArts/FormCalc updated

Monday 15 May 2006 15:30 (20 minutes)

Presenter: PENARANDA, Siannah

Session Classification: WG1, Monday afternoon

Contribution ID: 63 Type: not specified

Calchep for BSM physics

Monday 15 May 2006 16:00 (20 minutes)

Presenter: PUKHOV, Sahsa

Session Classification: WG1, Monday afternoon

Contribution ID: 64 Type: not specified

Discovering the Higgs boson in heavy singlet decays

Tuesday 16 May 2006 09:30 (20 minutes)

Presenter: AGUILAR-SAAVEDRA, Juan Antonio

Session Classification: WG1, Tuesday morning

Contribution ID: 65 Type: not specified

The Fourth SM Family: Present Status

Tuesday 16 May 2006 10:00 (20 minutes)

Presenter: SULTANSOY, Saleh

Session Classification: WG1, Tuesday morning

Contribution ID: 66 Type: not specified

New physics effects to Vtb measurements in single top production at LHC

Monday 15 May 2006 10:00 (20 minutes)

Presenter: KOU, Emi

Session Classification: WG1, Monday morning

Contribution ID: 67 Type: not specified

Signals for Flavor Violation in Warped Extra Dimensions

Tuesday 16 May 2006 10:30 (20 minutes)

Presenter: BURDMAN, Gustavo

Session Classification: WG1, Tuesday morning

Contribution ID: 68 Type: not specified

Physics with LHCb

Contribution ID: 69 Type: not specified

Flavour physics at LHC

Tuesday 16 May 2006 14:00 (40 minutes)

Presenter: NAKADA, Tatsuya

Session Classification: Super B factories

Contribution ID: **70** Type: **not specified**

Flavour physics at KEK Super-B

Tuesday 16 May 2006 14:40 (30 minutes)

Presenter: YAMAUCHI, Masa

Session Classification: Super B factories

Contribution ID: 71 Type: not specified

Flavour physics with a linear Super-B factory

Tuesday 16 May 2006 15:10 (30 minutes)

Presenter: GIORGI, Marcello

Session Classification: Super B factories

Contribution ID: 72 Type: not specified

Design of KEK Super-B factory

Tuesday 16 May 2006 16:00 (30 minutes)

Presenter: OIDE, Katsunobu

Session Classification: Super B factories

Contribution ID: 73 Type: not specified

Design of a linear Super-B

Tuesday 16 May 2006 16:30 (30 minutes)

Presenter: RAIMONDI, Pantaleo

Session Classification: Super B factories

Contribution ID: 74 Type: **not specified**

Round-table discussion with all five speakers

Tuesday 16 May 2006 17:00 (1 hour)

moderated by Ikaros Bigi

Session Classification: Super B factories

Contribution ID: 77 Type: **not specified**

Testing LFV measuring K -> e nu/K-> mu nu in NA48: status and perspectives

Monday 15 May 2006 15:00 (30 minutes)

The possibility for an improved precision measurement of the ratio of leptonic decay widths of the charge Kaon with the Na48/2 apparatus is discussed in the light of the interest which such channel acquired as a search for New Physics

Presenter: FIORINI, Luca (Camdridge)

Session Classification: WG3, Monday afternoon

Contribution ID: 78 Type: not specified

Tests of Time Reversal Violation (TRV) in atomic and nuclear physics - The TRImP facility nearing its completion

Tuesday 16 May 2006 12:00 (30 minutes)

This talk will cover the main approaches taken in atomic and nuclear physics to measure TRV. In particular, the search for an electric dipole moment of atoms. At the Kernfysisch Versneller Instituut an experimental facility is being created to produce radioactive isotopes that have favorable properties for TRV studies. The outline of this facility will be presented.

Presenter: WILSCHUT, Hans (KVI, Groningen)

Session Classification: WG3, Tuesday morning

Contribution ID: 79 Type: not specified

t-Channel single top production at LHC: a realistic test of electroweak models

Wednesday 17 May 2006 10:00 (20 minutes)

Presenter: VERZEGNASSI, Claudio

Session Classification: WG1, Wednesday morning

Contribution ID: 80 Type: not specified

Topological search for new flavour based physics in top quark events at the LHC

Monday 15 May 2006 10:30 (20 minutes)

Presenter: D'HONDT, Jorgen

Session Classification: WG1, Monday morning

Contribution ID: 81 Type: not specified

The Smoking Gun of Baryon Number Violation

Wednesday 17 May 2006 09:00 (20 minutes)

Presenter: SKANDS, Peter

Session Classification: WG1, Wednesday morning

Contribution ID: 82 Type: not specified

CMS potential for SUSY discovery in top + missing E_t final states.

Wednesday 17 May 2006 10:30 (15 minutes)

Presenter: PAKTINAT, Saeid

Session Classification: WG1, Wednesday morning

Contribution ID: 83 Type: not specified

Discussion on the SUSY Les Houches Accord

Monday 15 May 2006 14:00 (1h 30m)

Virtual room Forrest

Presenter: SKANDS, Peter

Session Classification: WG1/WG2 joint session

Contribution ID: 84 Type: not specified

Discussion session I

Monday 15 May 2006 09:00 (2 hours)

The WG3 part of the write-up of the workshop will be discussed.

Presenter: INTRODUCED BY RAIDAL, SEMERTZIDIS, VAN DER SCHAAF

Session Classification: WG3, Monday morning

Contribution ID: 85 Type: not specified

LFV from SUSY-GUTs

Wednesday 17 May 2006 09:30 (30 minutes)

We analyse the complementarity between Lepton Flavour Violation (LFV) and LHC experiments in probing the Supersymmetric (SUSY) Grand Unified Theories (GUT) when neutrinos got a mass via the see–saw mechanism. Our analysis is performed in an SO(10) framework, where at least one neutrino Yukawa coupling is necessarily as large as the top Yukawa coupling. Our study thoroughly takes into account the whole RG running, including the GUT and the right handed neutrino mass scales, as well as the running of the observable neutrino spectrum. We find that the upcoming (MEG, SuperKEKB) and future (PRISM/PRIME, Super Flavour factory) LFV experiments will be able to test such SUSY framework for SUSY masses to be explored at the LHC and, in some cases, even beyond the LHC sensitivity reach.

Presenter: CALIBBI, Lorenzo (Padova)

Session Classification: WG3, Wednesday morning

Contribution ID: 86 Type: not specified

Convenors and study group contact meeting

Monday 15 May 2006 18:30 (30 minutes)

Presenter: WG2 CONVENORS

Session Classification: WG2, Monday afternoon

Contribution ID: 87 Type: not specified

Distributing the work for the report

Who will contribute what?

Contribution ID: 88 Type: not specified

Discussion session II

Wednesday 17 May 2006 10:00 (1 hour)

Continuation of session I

Presenter: MODERATED BY BIGI, RAIDAL, VAN DER SCHAAF

Session Classification: WG3, Wednesday morning

Contribution ID: 89 Type: not specified

Discussion session II continued

Wednesday 17 May 2006 11:30 (1 hour)

Session Classification: WG3, Wednesday morning

Contribution ID: 90 Type: not specified

WG1, convener meeting

Monday 15 May 2006 17:30 (1 hour)

Session Classification: WG1, Monday afternoon

Contribution ID: 91 Type: not specified

discussion on the PHOTOS tool

Wednesday 17 May 2006 11:30 (1 hour)

Presenter: WAS, Zbigniew

Session Classification: WG1, Wednesday morning

Contribution ID: 92 Type: not specified

Status report on the top FCNC studies at the LHC

Monday 15 May 2006 09:45 (10 minutes)

Presenter: CASTRO, Nuno

Session Classification: WG1, Monday morning

Contribution ID: 93 Type: not specified

Looking for Wtb anomalous couplings in top pair decays

Monday 15 May 2006 11:30 (20 minutes)

Presenter: AGUILAR-SAAVEDRA, Juan Antonio

Session Classification: WG1, Monday morning

Contribution ID: 94 Type: not specified

Studies of top quark decay asymmetries

Monday 15 May 2006 12:00 (20 minutes)

Presenter: CARVALHO, Joao

Session Classification: WG1, Monday morning

Contribution ID: 95 Type: not specified

Conveners' meeting

Wednesday 17 May 2006 16:25 (1 hour)

Meet in the Cafeteria

Session Classification: WG reports