Prospects For Charged Higgs Discovery At Colliders (CHARGED 2010)

Report of Contributions

https://indico.cern.ch/e/charged2010

Contribution ID: **0** Type: **not specified**

Evolution of Universe to a modern state if Dark Matter is given by additional Higgs doublet (inert model)

We discuss thermal evolution of Universe after inflation in the frame of Inert doublet model in the case when modern state of Universe with dark matter is described by inert doublet model.

Summary

There is an opportunity that Dark Matter is given by additional as compare SM, Higgs doublet (inert model). This Higgs doublet interacts with standard Higgs doublet and don't ineract to fermions. During cooling down of Universe parameters of this interaction vary. It can results in change of phase states of Universe. In particular, very probable variant is that after EWSB transition the Universe comes to the state without candidates for Dark Matter and only later on it comes to the modern state with Dark Matter either via 1-st order phase transition or via chain of two 2-nd order phase transitions.

Primary author: Prof. GINZBURG, Ilya (Sobolev Inst)

Co-authors: Mr KANISHEV, Konstantin (Novosibirsk State University); Prof. KRAWCZYK, Maria (Warsaw University)

Presenter: Prof. GINZBURG, Ilya (Sobolev Inst)

Contribution ID: **1** Type: **not specified**

Charged Higgs production and decay for Signature of Inert Higgs Doublet Model.

We propose method for using of production od charged Higgs pair in e^+e^- collisions (at LC) for discovery of Dark Matter (DM) particles and measuring of their mass if they appear as scalar of Inert doublet model. In many cases this approach is also useful for another mechanisms of DM.

Summary

There is an opportunity that Dark Matter is given by additional as compare SM, Higgs doublet (inert model). This Higgs doublet interacts with standard Higgs doublet and don't interact to fermions. This additional Higgs doublet is realized as 3 scalars, neutral scalar D and pseudoscalar D_A and charged scalar $D^{\pm}$, with conservation of D-parity. In this model D realizes Dark Matter (DM) while $D^{\pm}$ and D_A are more heavy. Typically $M_D < 80$ GeV. The best machine for checking on this model is e^+e^- Linear Collider. The dominant decay of $D^{\pm}$ is decay to $DW^{\pm}$ with W either on mass shell (if mass of $D^{\pm}$ is high enough) or beyond. The main discovery channel is $e^+e^- \to D^+D^- \to W^+W^-DD$. The cross section of this process is about 5\% from that of entire hadron production. We suggest to observe W bosons in two jet modes and to measure their effective mass M_{jj}. The signature of this process is observation of these two W's with large missed transverse energy. The SM processes with such production has much lower cross section (additional factors α for each additional neutrino). The details of momentum distribution of produced W allow to determine masses $D^{\pm}$ and D with reasonable accuracy. The measuring of cross sections $e^+e^- \to D^+D^-h$ and $e^+e^- \to D^+D^-hh$, $e^+e^- \to D^+D^-DD$ allows to determine all couplings of model.

Primary author: Prof. GINZBURG, Ilya (Sobolev Inst. of Mathematics SB RAS)

Co-author: Mr KANISHEV, Konstantin (Novosibirsk State University)

Presenter: Prof. GINZBURG, Ilya (Sobolev Inst. of Mathematics SB RAS)

Contribution ID: **2** Type: **not specified**

ttbar backgrounds in charged Higgs searches

Top quark pair production is the main background for searches in most charged Higgs boson channels. The characteristics of this background are shown, as well as the contribution of the different ttbar decay modes: they can be separated into “irreducible” ttbar modes with the same final state as the signal, and “reducible” modes which contributes e.g. if an electron is misreconstructed as a tau. I will then present techniques to suppress and estimate the ttbar background contribution to the charged Higgs boson searches.

Primary author: FLECHL, Martin (Universität Freiburg)

Presenter: FLECHL, Martin (Universität Freiburg)

Contribution ID: **3** Type: **not specified**

Implications of Yukawa texture in the charged Higgs boson phenomenology within 2HDM-III

We discuss the implications of assuming a four-zero Yukawa texture for the properties of the charged Higgs boson within the context of the general 2-Higgs Doublet Model of Type III. We begin by presenting a detailed analysis of the charged Higgs boson couplings with heavy quarks and the resulting pattern for its decays, including the decay $H^+ \to W^+\gamma$ at 1-loop level. The parameters chosen can still avoid the $B \to X_s\gamma$ constraint,
the perturbativity and ρ_0 bound. Also, we present the constraints of $B0 - \bar{B}0$ mixing and of the radiative corrections to the $Zb\bar{b}$ vertex in the regime small $\tan\beta$. The production of charged Higgs bosons is also sensitive to the modifications of its couplings, so that we also evaluate the resulting effects on the top decay $t \to bH^+$ as well as on direct' $c\bar{b} \to H^+ + c.c.$ andindirect' $q\bar{q}, gg \to \bar{t}bH^+ + c.c.$ production. Significant scope exists at the Large Hadron Collider for several $H^\pm$ production and decay channels combined to enable one to distinguish between such a model and alternative 2-Higgs doublet scenarios.

Summary

1. Implications of four-zero Yukawa texture for the 2HDM-III.
2. A detailed analysis of the charged Higgs boson coupling with fermions.
3. The resulting pattern for the decays of the charged Higgs boson.
4. The decay $H^+ \to W^+\gamma$ at one-loop level.
5. Some electroweaks constraints for mass of the charged Higgs bosons and for parameters of Higgs potential.
6. The top decay $t \to bH^+$
7. The direct' $c\bar{b} \to H^+ + c.c.$ andindirect' $q\bar{q}, gg \to \bar{t}bH^+ + c.c.$ production.
8. We evaluate the events rates at the LHC.

Primary author: Dr HERNÁNDEZ-SÁNCHEZ, Jaime (Benemerita Universidad Autónoma de Puebla)

Co-authors: Dr ROSADO, Alfonso (Benemerita Universidad Autónoma de Puebla); Dr DIAZ, Lorenzo (Benemerita Universidad Autónoma de Puebla); Dr NORIEGA-PAPAQUI, Roberto (Universidad Autonoma del Estado de Hidalgo); Dr MORETTI, Stefano (School of Physics and Astronomy, University of Southampton, Highfield, Southampton SO17 1BJ, UK.)

Presenter: Dr HERNÁNDEZ-SÁNCHEZ, Jaime (Benemerita Universidad Autónoma de Puebla)

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

Charged-Higgs phenomenology in the Aligned two-Higgs-doublet model

The alignment in flavour space of the Yukawa matrices of a general two-Higgs-doublet model results in the absence of tree-level flavour-changing neutral currents. In addition to the usual fermion masses and mixings, the aligned Yukawa structure only contains three complex parameters, which are potential new sources of CP violation. For particular values of these three parameters all known specific implementations of the model based on discrete Z2 symmetries are recovered.
One of the most distinctive features of the two-Higgs-doublet model is the presence of a charged scalar. In this talk, I will discuss its main phenomenological consequences in flavour-changing processes at low energies, ranging from leptonic decays to the recently widely discussed like-sign dimuon charge asymmetry.

Primary author: JUNG, Martin (IFIC)

Presenter: JUNG, Martin (IFIC)

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

Status of the CMS experiment

The review of the latest CMS physics results related to the preparation for the charged Higgs boson discovery at LHC will be given. In particular, the performance of the jet and missing Et reconstruction, b-jet tagging, the measurement of the jet-tau fake rate will be presented. The results on the W and Z cross-section measurement and observation of tt˜ events will also be shown.

Primary author: NIKITENKO, Alexandre (Imperial College)

Presenter: NIKITENKO, Alexandre (Imperial College)

Contribution ID: **6** Type: **not specified**

Status of the ATLAS experiment

The ATLAS Experiment at the CERN Large Hadron Collider
was operated with colliding proton beams at 7 TeV center of mass energy
since March 2010. It will study a broad range of particle physics at the
highest available laboratory energies, from measurements of the standard
model to searches for new physics beyond the standard model.
At the time of writing ATLAS, with high data taking efficiency, has integrated
a luminosity of 330 nb-1, which allowed already observation and measurement
of standard model processes, like vector boson and top production.
Detector status, event reconstruction and particle identification performance
in this first period of operation will be presented together with the first
physics results.

Primary author: ORESTANO, Domizia (Universita di Roma Tre and INFN)

Presenter: ORESTANO, Domizia (Universita di Roma Tre and INFN)

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

ATLAS discovery prospects for the charged Higgs in the H+->taunu final state

We present projections for the ATLAS sensitivity to a light charged Higgs boson in channel H->taunu->lnu, present in models beyond the Standard Model, with an expected dataset corresponding to an integrated luminosity of 1fb-1 gathered at the ATLAS detector with the LHC running at 7 TeV. The results are based on re-scaling expectations from detailed analyses at 10 TeV using cross-section ratios.

Primary author: Mr KLEMETTI, Miika (McGill University)

Presenter: Mr KLEMETTI, Miika (McGill University)

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

CMS performance on b reconstruction

The identification of jets containing the weak decay of a B-hadron is an essential tool for a wide range of analyses in the context of the Standard Model and beyond. A variety of algorithms exploit the long lifetime and the presence of soft leptons to discriminate these jets from those associated to light quarks. The distributions of the corresponding observables - track impact parameters, secondary vertices and lepton momenta - were measured in pp collisions at sqrt(s) = 7 TeV and compare well to the predictions of Monte Carlo simulation. First results on efficiencies and mis-identification rates are shown.

Primary author: Dr KOMARAGIRI, Jyothsna Rani (Karlsruher Institut für Technologie (KIT))

Co-author: COLLABORATION, CMS (CERN)

Presenter: Dr KOMARAGIRI, Jyothsna Rani (Karlsruher Institut für Technologie (KIT))

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

Missing Et and jets, trigger and reconstruction efficiency in CMS

The reconstruction of the missing transverse energy and jets, the trigger plans and the reconstruction efficiencies in the CMS detector are discussed. The performance with the 7 TeV proton-proton collision data is presented.

Primary author: Mr KORTELAINEN, Matti (Helsinki Institute of Physics)

Presenter: Mr KORTELAINEN, Matti (Helsinki Institute of Physics)

Contribution ID: **10** Type: **not specified**

Charged Higgses production via vector-boson fusion at NNLO in QCD

We present the total cross sections at next-to-next-to-leading order (NNLO) in the strong coupling for single and double charged Higgs production via weak boson fusion. Results are obtained via the structure function approach, which builds upon the approximate, though very accurate, factorization of the QCD corrections between the two quark lines. We also provide ans estimate for the theoretical uncertainty on the total cross sections at the LHC from higher order corrections and the parton distribution uncertainties.

Primary author: ZARO, Marco (Center for Particle Physics and Phenomenology)

Co-authors: MALTONI, Fabio (CP3 - Louvain§); BOLZONI, Paolo (DESY-Zeuthen); MOCH, Sven-Olaf (DESY-Zeuthen)

Presenter: ZARO, Marco (Center for Particle Physics and Phenomenology)

Contribution ID: **11** Type: **not specified**

Charged Higgs in CP-conserving 2HDM

The LHC has started colliding protons. Several extensions of the Standard Model predict a charged scalar particle which according to the LEP bound
could be as light as 100 GeV. In this work we compare the four flavour conserving Yukawa versions of a CP-conserving two-Higgs doublet model (2HDM) regarding charged Higgs production and decay. We define a set of benchmarks where an early detection is possible at the 14 TeV LHC. Furthermore, we determine the luminosity required to distinguish between the four Yukawa versions of the CP-conserving 2HDM for a chosen set of benchmarks.

Primary author: SANTOS, Rui (University of Southampton and NExT Institute)

Co-authors: YAGYU, Kei (University of Toyama); GUEDES, Renato (CFTC); KANEMURA, Shinya (University of Toyama); MORETTI, Stefano (SHEP)

Presenter: SANTOS, Rui (University of Southampton and NExT Institute)

Contribution ID: **14** Type: **not specified**

double charged scalars of littlest higgs model in ee colliders

Little higgs models, as a result of extended symmetry group of S.M contain heavy scalars in their content of particles. In the littlest Higgs model of little Higgs models there exists a new heavy scalar triplet.The physical states of this trilet contains a double charged scalar, a single charged scalar, as well as a neutral scalar and a neutral pseudoscalar. In little higgs models a majorana type mass term can also be implemented in yukawa lagrangian, resulting lepton flavour violation.

In this work the pair production of double charged scalars in the context of littlest higgs model im ee coliders is studied. Also the final signitures of double charged scalars are investigated depending on lepton flavour violation parameters. Finally it is seen that if there is lepton flavour violation double charged salars can be observed without any SM background in ee colliders with a collider signal of four leptons, otherwise if there is no lepton flavour violation they can be reconstructed with a background analysis.

Primary author: Dr CAGIL, Ayse (Exptl. High Energy Physics Lab.-Physics Department-Middle East T)

Presenter: Dr CAGIL, Ayse (Exptl. High Energy Physics Lab.-Physics Department-Middle East T)

Contribution ID: **15** Type: **not specified**

Status of the LHC machine

Monday, 27 September 2010 14:10 (35 minutes)

Presenter: MYERS, Steve (CERN)

Session Classification: Invited talks on experiment

Contribution ID: **16** Type: **not specified**

Status of the ATLAS experiment

Monday, 27 September 2010 14:50 (35 minutes)

Presenter: ORESTANO, Domizia (Universita di Roma Tre)

Session Classification: Invited talks on experiment

Contribution ID: **17** Type: **not specified**

Status of the CMS experiment

Monday, 27 September 2010 15:30 (35 minutes)

Presenter: NIKITENKO, Alexandre (Imperial College)

Session Classification: Invited talks on experiment

Contribution ID: **18** Type: **not specified**

Coffee break

Contribution ID: **19** Type: **not specified**

Review of charged Higgs searches at the Tevatron

Monday, 27 September 2010 16:40 (35 minutes)

Presenters: GUTIERREZ, Phillip (University of Oklahoma); GUTIERREZ, Phillip (University of Oklahoma-Unknown-Unknown)

Session Classification: Invited talks on experiment

Contribution ID: **20** Type: **not specified**

Review of indirect charged Higgs searches at B factories

Monday, 27 September 2010 17:20 (35 minutes)

Presenter: ROZANSKA, Maria (Institute of Nuclear Physics PAN)

Session Classification: Invited talks on experiment

Contribution ID: **21** Type: **not specified**

Interpretation of charged Higgs effects in low energy flavour physics

Tuesday, 28 September 2010 09:00 (30 minutes)

Presenter: HURTH, Tobias (CERN)

Session Classification: Invited talks on theory and phenomenology

Contribution ID: **22** Type: **not specified**

Light charged Higgs in NMSSM

Tuesday, 28 September 2010 09:35 (30 minutes)

Presenter: DERMISEK, Radovan

Session Classification: Invited talks on theory and phenomenology

Contribution ID: **23** Type: **not specified**

Charged Higgs in Extended Higgs models (non-type II model)

Tuesday, 28 September 2010 10:40 (30 minutes)

Presenter: AKEROYD, Andrew

Session Classification: Invited talks on theory and phenomenology

Contribution ID: **24** Type: **not specified**

Higher order corrections to charged Higgs production including EW corrections

Tuesday, 28 September 2010 11:15 (30 minutes)

Presenter: VERZEGNASSI, Claudio (Univ. + INFN)

Session Classification: Invited talks on theory and phenomenology

Contribution ID: **25** Type: **not specified**

Tools for charged Higgs bosons

Tuesday, 28 September 2010 11:50 (30 minutes)

Presenter: STÅL, Oscar (DESY)

Session Classification: Invited talks on theory and phenomenology

Contribution ID: **26** Type: **not specified**

Reports from the Charged Higgs Benchmark working group: general 2HDM

Tuesday, 28 September 2010 17:00 (30 minutes)

Presenters: KRAWCZYK, Maria (Warsaw University of Technology); OSLAND, Per (Unknown)

Session Classification: discussion on benchmark scenarios

Contribution ID: **27** Type: **not specified**

Charged Higgs production at NLO in 4FS vs 5FS

Tuesday, 28 September 2010 14:00 (20 minutes)

Presenter: KRAEMER, Michael (Particle Physics)

Session Classification: Contributed talks on theory and models

Contribution ID: **28** Type: **not specified**

Contributed talks

Contribution ID: **29** Type: **not specified**

Associated charged Higgs and top production in MC@NLO

Wednesday, 29 September 2010 09:00 (20 minutes)

Presenter: PLEHN, Tilman (Heidelberg University)

Session Classification: Contributed talks on phenomenology and tools

Contribution ID: **30** Type: **not specified**

HiggsBounds

Wednesday, 29 September 2010 09:25 (20 minutes)

Presenter: BREIN, Oliver (Universitaet Freiburg)

Session Classification: Contributed talks on phenomenology and tools

Contribution ID: **31** Type: **not specified**

Contributed phenomenology talks

Contribution ID: **32** Type: **not specified**

Tau trigger and tau reconstruction, efficiency and fake rates in ATLAS

Wednesday, 29 September 2010 14:00 (20 minutes)

Presenter: COADOU, Yann (CPPM Marseille)

Session Classification: Contributed talks on charged Higgs analysis tools and backgrounds

Contribution ID: **33** Type: **not specified**

b reconstruction, efficiency and fake rates in CMS

Wednesday, 29 September 2010 14:25 (20 minutes)

Presenter: Dr KOMARAGIRI, Jyothsna Rani (Karlsruher Institut für Technologie (KIT))

Session Classification: Contributed talks on charged Higgs analysis tools and backgrounds

Contribution ID: **34** Type: **not specified**

Missing ET and jets, trigger and reconstruction efficiency

Wednesday, 29 September 2010 14:50 (20 minutes)

Presenter: Mr KORTELAINEN, Matti (Helsinki Institute of Physics (HIP))

Session Classification: Contributed talks on charged Higgs analysis tools and backgrounds

Contribution ID: **35** Type: **not specified**

QCD backgrounds in charged Higgs searches

Wednesday, 29 September 2010 16:55 (20 minutes)

Presenter: ATTIKIS, Alexandros (University of Cyprus-Unknown-Unknown)

Session Classification: Contributed talks on charged Higgs analysis tools and backgrounds

Contribution ID: **36** Type: **not specified**

W + jets backgrounds in charged Higgs searches

Wednesday, 29 September 2010 17:20 (20 minutes)

Presenter: Dr TARRADE, Fabien (Brookhaven National Laboratory)

Session Classification: Contributed talks on charged Higgs analysis tools and backgrounds

Contribution ID: **37** Type: **not specified**

ttbar backgrounds in charged Higgs searches

Wednesday, 29 September 2010 17:45 (20 minutes)

Presenter: FLECHL, Martin (Universität Freiburg)

Session Classification: Contributed talks on charged Higgs analysis tools and backgrounds

Contribution ID: **38** Type: **not specified**

Search strategies for charged Higgs in ATLAS

Wednesday, 29 September 2010 16:05 (20 minutes)

Presenter: FERRARI, Arnaud (University of Uppsala)

Session Classification: Contributed talks on charged Higgs analysis tools and backgrounds

Contribution ID: **39** Type: **not specified**

Search strategies for charged Higgs in CMS

Wednesday, 29 September 2010 16:30 (20 minutes)

Presenter: GALLINARO, Michele (LIP Lisbon)

Session Classification: Contributed talks on charged Higgs analysis tools and backgrounds

Contribution ID: **40** Type: **not specified**

Systematics in charged Higgs searches in ATLAS

Thursday, 30 September 2010 09:30 (20 minutes)

Presenter: GENTILE, Simonetta (Universita di Roma I "La Sapienza")

Session Classification: Contributed talks on charged Higgs search strategies and systematic

Contribution ID: **41** Type: **not specified**

Systematics in charged Higgs searches in CMS

Thursday, 30 September 2010 09:55 (20 minutes)

Presenter: WENDLAND, Lauri Andreas (Helsinki Institute of Physics (HIP) - Univ. of Helsinki, Fac. of)

Session Classification: Contributed talks on charged Higgs search strategies and systematic

Contribution ID: **42** Type: **not specified**

ATLAS discovery prospects for the charged Higgs in the H+->taunu final state

Thursday, 30 September 2010 10:20 (20 minutes)

Presenter: KLEMETTI, Miika (McGill University)

Session Classification: Contributed talks on charged Higgs search strategies and systematic

Contribution ID: **43** Type: **not specified**

ATLAS discovey prospects for a light charged Higgs in the H+->csbar channel

Thursday, 30 September 2010 11:15 (20 minutes)

Presenter: Dr YANG, Un-ki (University of Manchester)

Session Classification: Contributed talks on charged Higgs search strategies and systematic

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

Charge Higgs physics at CLIC/ILC

Thursday, 30 September 2010 11:40 (20 minutes)

Presenter: BATTAGLIA, Marco (UCSC and CERN)

Session Classification: Contributed talks on charged Higgs search strategies and systematic

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

Summary and outlook for theory

Thursday, 30 September 2010 14:15 (40 minutes)

Presenter: Prof. MORETTI, Stefano (NExT Institute)

Session Classification: Concluding session with summary and outlook

Contribution ID: **46** Type: **not specified**

Summary and outlook for experiment

Thursday, 30 September 2010 13:30 (40 minutes)

Presenter: JAKOBS, Karl (Fakultaet fuer Physik)

Session Classification: Concluding session with summary and outlook

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

Tau trigger and tau reconstruction, efficiency and fake rates in ATLAS

Tau leptons will play an important role in the physics program at the LHC. In particular, they provide a useful signature in searches for new phenomena like charged Higgs bosons or Supersymmetry. In addition, they are being used for standard model electroweak measurements and for detector related studies such as the determination of the missing transverse energy scale.

Due to the huge background from QCD processes, efficient tau identification techniques with large fake rejection are essential. Tau objects appear as collimated jets with low track multiplicity and single variable criteria are not enough to efficiently separate them from jets and electrons.

We report on the commissioning steps and performance of the tau trigger, which is designed to efficiently reject low-energy jets while keeping a high efficiency with respect to hadronic tau leptons identified by the offline algorithms.

We present the current status of tau reconstruction and identification at the LHC with the ATLAS detector. Reconstructed tau candidates in dijet backgrounds and W->taunu signal events are studied in data and compared with predictions from Monte Carlo simulation. The performance of the fake tau rejection is estimated in a dijet data sample. We discuss the plans for measuring tau identification efficiency using Z->tautau signal events and the fake rate using photon+jet and Z+jets background events. Both cut-based and more advanced multivariate techniques which make optimal use of all the information available are presented. These standard model measurements are instrumental in validating tau identification for discovery physics.

Primary author: Dr COADOU, Yann (CPPM Marseille)

Presenter: Dr COADOU, Yann (CPPM Marseille)

Track Classification: Analysis tools and backgrounds

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

Welcome by Vicerector Joseph Nordgren

Monday, 27 September 2010 14:00 (10 minutes)

Session Classification: Invited talks on experiment

Contribution ID: **49** Type: **not specified**

Charged Higgs production via vector-boson fusion at NNLO in QCD

Tuesday, 28 September 2010 14:25 (15 minutes)

Presenter: ZARO, Marco (Center for Particle Physics and Phenomenology)

Session Classification: Contributed talks on theory and models

Contribution ID: **50** Type: **not specified**

Evolution of Universe to a modern state if Dark Matter is given by additional Higgs doublet (inert model)

Tuesday, 28 September 2010 14:45 (15 minutes)

Presenter: GINZBURG, Ilya (Sobolev Inst)

Session Classification: Contributed talks on theory and models

Contribution ID: **51** Type: **not specified**

The Inert Doublet Model as the Dark matter

Tuesday, 28 September 2010 15:05 (15 minutes)

Presenter: GUSTAFSSON, Michael

Session Classification: Contributed talks on theory and models

Contribution ID: **52** Type: **not specified**

Charged Higgs production and decay for Signature of Inert Higgs Doublet Model

Tuesday, 28 September 2010 15:55 (15 minutes)

Presenter: GINZBURG, Ilya (Sobolev Inst)

Session Classification: Contributed talks on theory and models

Contribution ID: **53** Type: **not specified**

Hidden Higgs Doublet model

Tuesday, 28 September 2010 16:15 (15 minutes)

Presenter: WOUDA, Glenn (Uppsala University)

Session Classification: Contributed talks on theory and models

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

Double charged scalars of littlest higgs model in ee colliders

Tuesday, 28 September 2010 16:35 (15 minutes)

Presenter: CAGIL, Ayse (Exptl. High Energy Physics Lab.-Physics Department-Middle East T)

Session Classification: Contributed talks on theory and models

Contribution ID: **55** Type: **not specified**

2HDMC –a two Higgs Doublet Model Calculator

Wednesday, 29 September 2010 09:50 (15 minutes)

Presenter: RATHSMAN, Johan Christoffer (Department of Physics and Astronomy-University of Uppsala)

Session Classification: Contributed talks on phenomenology and tools

Contribution ID: **56** Type: **not specified**

Flavour contraints and SuperIso

Wednesday, 29 September 2010 10:10 (20 minutes)

Presenter: Dr MAHMOUDI, Nazila (Clermont-Ferrand)

Session Classification: Contributed talks on phenomenology and tools

Contribution ID: **57** Type: **not specified**

Constraining the Charged Higgs Mass in the MSSM: A Low-Energy Approach

Wednesday, 29 September 2010 11:05 (15 minutes)

Presenter: Prof. KOLDA, Christopher (University of Notre Dame)

Session Classification: Contributed talks on phenomenology and tools

Contribution ID: **58** Type: **not specified**

Charged Higgs in CP-conserving 2HDM

Wednesday, 29 September 2010 11:25 (15 minutes)

Presenter: SANTOS, Rui (University of Southampton and NExT Institute)

Session Classification: Contributed talks on phenomenology and tools

Contribution ID: **59** Type: **not specified**

Implications of Yukawa texture in the charged Higgs boson phenomenology within 2HDM-III

Wednesday, 29 September 2010 11:45 (15 minutes)

Presenter: HERNÁNDEZ, Jaime (Benemerita Universidad Autónoma de Puebla)

Session Classification: Contributed talks on phenomenology and tools

Contribution ID: **60** Type: **not specified**

Charged-Higgs phenomenology in the Aligned two-Higgs-doublet model

Wednesday, 29 September 2010 12:05 (15 minutes)

Presenter: JUNG, Martin (IFIC)

Session Classification: Contributed talks on phenomenology and tools

Contribution ID: **61** Type: **not specified**

Higher-order corrections to M_H+ and stop_i -> sbottom_j H+

Wednesday, 29 September 2010 12:25 (15 minutes)

Presenter: HEINEMEYER, Sven (CERN)

Session Classification: Contributed talks on phenomenology and tools

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

Registration

Monday, 27 September 2010 13:00 (1 hour)

Session Classification: Registration from 13:00

Contribution ID: **63** Type: **not specified**

Report from the Charged Higgs benchmark working group: NMSSM

Tuesday, 28 September 2010 17:30 (20 minutes)

Presenters: FLECHL, Martin (Universität Freiburg); Prof. MORETTI, Stefano (NExT Institute)

Session Classification: discussion on benchmark scenarios

Contribution ID: **64** Type: **not specified**

Report from the Charged Higgs benchmark working group: Sparticle prod and decay

Tuesday, 28 September 2010 17:50 (20 minutes)

Presenters: ASSAMAGAN, Ketevi Adikle (Department of Physics); HEINEMEYER, Sven (CERN)

Session Classification: discussion on benchmark scenarios

Contribution ID: **65** Type: **not specified**

Transfer function treatment of leptonic tau decays in the Matrix Element Method

Wednesday, 29 September 2010 15:15 (15 minutes)

Presenter: BELANGER-CHAMPAGNE, Camille (Dept. of Nuclear and Particle Phys.-University of Uppsala)

Session Classification: Contributed talks on charged Higgs analysis tools and backgrounds