

IOP HEPP Particle Physics 2008

Report of Contributions

Contribution ID: 0

Type: **not specified**

Detectors

Monday, 31 March 2008 13:30 (30 minutes)

Primary author: VIRDEE, Tejinder (CERN/Imperial College)

Presenter: VIRDEE, Tejinder (CERN/Imperial College)

Session Classification: Plenary Session 1

Contribution ID: 1

Type: **not specified**

Accelerators

Monday, 31 March 2008 14:00 (30 minutes)

Primary author: CHATTOPADHYAY, Swapan (The Cockcroft Institute)

Presenter: CHATTOPADHYAY, Swapan (The Cockcroft Institute)

Session Classification: Plenary Session 1

Contribution ID: 2

Type: **not specified**

Electroweak

Monday, 31 March 2008 14:30 (30 minutes)

Primary author: MARTIN, Victoria (University of Edinburgh)

Presenter: MARTIN, Victoria (University of Edinburgh)

Session Classification: Plenary Session 1

Contribution ID: 3

Type: **not specified**

SM/MSSM/Higgs

Tuesday, 1 April 2008 09:00 (45 minutes)

Presenter: Dr SOLDNER-REMBOLD, Stefan (Manchester University)

Session Classification: Plenary Session 2

Contribution ID: 4

Type: **not specified**

QCD and the legacy of HERA

Tuesday, 1 April 2008 09:45 (45 minutes)

Primary author: BUTTERWORTH, Jonathan (University College London)

Presenter: BUTTERWORTH, Jonathan (University College London)

Session Classification: Plenary Session 2

Contribution ID: 5

Type: **not specified**

Heavy Flavour and CP Violation

Wednesday, 2 April 2008 14:00 (45 minutes)

Presenter: SMIZANSKA, Maria (Lancaster University)

Session Classification: Plenary Session 4

Contribution ID: 6

Type: **not specified**

Theory Overview

Wednesday, 2 April 2008 14:45 (45 minutes)

Presenter: Prof. GLOVER, Nigel (Institute for Particle Physics Phenomenology, University of Durham)

Session Classification: Plenary Session 4

Contribution ID: 7

Type: **not specified**

Astro-Particle

Wednesday, 2 April 2008 09:00 (30 minutes)

Presenter: Prof. COPELAND, Ed (University of Sussex)

Session Classification: Plenary Session 3

Contribution ID: 8

Type: **not specified**

Neutrinos

Wednesday, 2 April 2008 09:30 (30 minutes)

Presenter: Dr MCCAULEY, Neil (University of Liverpool)

Session Classification: Plenary Session 3

Contribution ID: 9

Type: **not specified**

Grid Computing

Wednesday, 2 April 2008 10:00 (30 minutes)

Presenter: Dr PATRICK, Glenn (RAL)

Session Classification: Plenary Session 3

Contribution ID: 12

Type: **not specified**

Quarkonium production and polarisation with early data at ATLAS

Tuesday, 1 April 2008 11:00 (12 minutes)

One of the first physics results to come out of ATLAS will be an analysis of J/psi and Upsilon production at 14 TeV. I present an overview of the motivation for looking into the theoretical model underlying quarkonium production, ATLAS expected performance and rates for quarkonium reconstruction and its ability to separate out various proposed production models with a view to improving our understanding of QCD.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr PRICE, Darren (Lancaster University)

Presenter: Mr PRICE, Darren (Lancaster University)

Session Classification: Parallel 2B: Flavour Physics - LHC

Contribution ID: 13

Type: **not specified**

Z boson decay to photon plus Kaluza Klein graviton in large extra dimensions

Wednesday, 2 April 2008 11:13 (12 minutes)

In the large extra dimensional ADD scenario, Z bosons undergo a one-loop decay into a photon and Kaluza-Klein towers of gravitons/gravi-scalars. We consider the phenomenology of this decay, using LEP data to derive constraints on the size of such extra dimensions.

Talk, Poster, or Talk & Poster

Talk

Primary author: SKITTRALL, Jordan (University of Cambridge, UK)

Co-authors: ALLANACH, Ben (University of Cambridge, UK); SRIDHAR, K. (Tata Institute of Fundamental Research, Bombay, India)

Presenter: SKITTRALL, Jordan (University of Cambridge, UK)

Session Classification: Parallel 3A: Collider - BSM

Contribution ID: 14

Type: **not specified**

The top quark threshold at the ILC

Tuesday, 1 April 2008 11:00 (12 minutes)

The top quark threshold at the ILC offers unique opportunities to make measurements of the top quark properties (mass, width, couplings) to an unprecedented precision. I will describe how the measurement will be done, give an overview of the main experimental issues and present recent developments leading to a full simulation of the precision reach at the ILC.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr GOURNARIS, Filimon (UCL)**Presenter:** Mr GOURNARIS, Filimon (UCL)**Session Classification:** Parallel 2C: ILC Physics and Accelerator

Contribution ID: 15

Type: **not specified**

Double beta decay of Neodymium-150 in the NEMO-3 experiment

Monday, 31 March 2008 15:30 (12 minutes)

The NEMO3 detector is a currently running double beta decay experiment in Modane underground laboratory in France. Neodymium-150 is one of the 7 double beta decay isotopes in NEMO3. This work presents a precise measurement of the two neutrino double beta decay half-life of Neodymium-150 and also limits on the half-life of the different neutrinoless modes of this isotope.

Talk, Poster, or Talk & Poster

talk

Primary author: Ms FATEMI-GHOMI, nasim (manchesteruniversity)

Presenter: Ms FATEMI-GHOMI, nasim (manchesteruniversity)

Session Classification: Parallel 1C: Neutrino Physics

Contribution ID: 16

Type: **not specified**

Measurements of Partial Branching Fractions for $B \rightarrow X$ and Determination of $|V_{ub}|$ at BaBar

Monday, 31 March 2008 15:30 (12 minutes)

We present partial branching fractions for inclusive charmless semileptonic B decays $B \rightarrow Xu l ?$, and the determination of the CKM matrix element $|V_{ub}|$. The analysis is based on a sample of 383 million $\Upsilon(4S)$ decays into B Bar pairs collected with the BaBar detector at the PEP-II e+e- storage rings.

$\Psi(4S) \rightarrow B \text{ Bar}$ events are tagged by the full reconstruction of a hadronic decay of one of the B mesons. Signal $B \rightarrow Xu l ?$ is then identified looking at several kinematic variables. The corresponding value of $|V_{ub}|$ is extracted.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr SIGAMANI, Michael (Queen Mary, University of London)

Presenter: Mr SIGAMANI, Michael (Queen Mary, University of London)

Session Classification: Parallel 1B: Flavour Physics B-factory and Tevatron

Contribution ID: 17

Type: **not specified**

A Search for Heavy Resonances in the e^+e^- Final State

Wednesday, 2 April 2008 11:00 (12 minutes)

At the LHC bunched proton proton collisions will occur at a centre of mass energy of 14 TeV, an order of magnitude greater than previously available. It has been shown that models predicting new heavy resonances decaying to electron-positron pairs may be detectable with a small data sample given the predicted clean event signature and low background. A search for such high mass events presents one of the earliest opportunities to search for new physics at this energy frontier.

Talk, Poster, or Talk & Poster

Talk

Primary author: EVANS, Dave (H.H. Wills Physics Laboratory)**Presenter:** EVANS, Dave (H.H. Wills Physics Laboratory)**Session Classification:** Parallel 3A: Collider - BSM

Contribution ID: 18

Type: **not specified**

Evidence for $b \rightarrow d\gamma$ Transitions Using a Sum of Exclusive Final States

Monday, 31 March 2008 15:43 (12 minutes)

We present details of an ongoing analysis of data collected by the BaBar detector at the PEP-II asymmetric-energy e^+e^- storage rings at SLAC. Making use of a sum of exclusive final states with up to three charged pions and one neutral pion or eta, we demonstrate that it is possible to measure the ratio of the inclusive rates $b \rightarrow d\gamma$ and $b \rightarrow s\gamma$. This provides information on $|V_{td}/V_{ts}|$ that is complementary to using the exclusive modes $B \rightarrow \rho\gamma$ and $B \rightarrow K^*\gamma$.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr TIBBETTS, Mark (Imperial College)

Presenter: Mr TIBBETTS, Mark (Imperial College)

Session Classification: Parallel 1B: Flavour Physics B-factory and Tevatron

Contribution ID: 19

Type: **not specified**

The Search for Higgs in the $W+W-$ Decay Channel at the CDF detector at Fermilab

Tuesday, 1 April 2008 11:00 (12 minutes)

An outline of the current search results for the standard model Higgs decaying to $W+W-$ and then to leptons from CDF. Descriptions and evaluations of the matrix element and neural net techniques which are presently used together in current searches.

Talk, Poster, or Talk & Poster

Talk & Poster

Primary author: Mr DAVIES, toby (glasgow university)**Presenter:** Mr DAVIES, toby (glasgow university)**Session Classification:** Parallel 2A: Collider Physics - Higgs

Contribution ID: 20

Type: **not specified**

Study of $B^{+-} \rightarrow D^0(K^{\pm}\pi^{\mp})K^{\pm}$ Dalitz decays and Sensitivity to γ in LHCb

Tuesday, 1 April 2008 11:13 (12 minutes)

A measurement of the CP angle γ at the tree-level is one of the principal goals of LHCb and provides a benchmark for any New Physics. One of the most precise direct determinations of γ comes from the amplitude analysis of the Dalitz plots in $B^{+-} \rightarrow (D^0/D^0\text{-bar})K^{\pm}$ decays, where the $D^0/D^0\text{-bar}$ decays to $K^{\pm}\pi^{\mp}$. This has been demonstrated at the B-factory experiments and will be a key measurement at the LHC with the first few years of data. This presentation will cover the expected event yields and backgrounds at LHCb with the first few years of data and provide an estimate of the sensitivity to γ .

Talk, Poster, or Talk & Poster

Talk

Primary author: Ms LI, Ying Ying (High Energy Physics Group, Cavendish Laboratory)**Co-author:** Dr GIBSON, Valerie (High Energy Physics Group, Cavendish Laboratory)**Presenter:** Ms LI, Ying Ying (High Energy Physics Group, Cavendish Laboratory)**Session Classification:** Parallel 2B: Flavour Physics - LHC

Contribution ID: 21

Type: **not specified**

Measurement of beauty photoproduction at HERA II with the ZEUS detector

Monday, 31 March 2008 15:30 (12 minutes)

Beauty photoproduction has been measured with the ZEUS detector using a sample of 124pb^{-1} of HERA II data. The beauty content of a sample with two jets and a muon was analysed exploiting the muon impact parameter, using information from the silicon vertex detector, and the transverse momentum of the muon relative to the closest jet. Differential cross sections for beauty production as a function of the transverse momentum and pseudorapidity of the muon are compared to next-to-leading order (NLO) QCD predictions and to previous measurements. As a further comparison with QCD calculations, dijet correlation cross sections have also been measured.

Talk, Poster, or Talk & Poster

Talk

Primary author: BOUTLE, Sarah (UCL)**Presenter:** BOUTLE, Sarah (UCL)**Session Classification:** Parallel 1A: Collider Physics - QCD and Electroweak**Track Classification:** QCD

Contribution ID: 22

Type: **not specified**

Simulations of BSM Physics

Wednesday, 2 April 2008 11:26 (12 minutes)

I will present the work I have been doing in simulations of BSM physics within the Herwig++ event generator.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr GIGG, Martyn (University of Durham)

Presenter: Mr GIGG, Martyn (University of Durham)

Session Classification: Parallel 3A: Collider - BSM

Contribution ID: 24

Type: **not specified**

Searching for a Higgs Boson in the channel $t\bar{t}H(H \rightarrow b\bar{b})$ with the ATLAS detector

Tuesday, 1 April 2008 11:39 (12 minutes)

The search of a Higgs Boson around the lower mass region (the mass indicated by LEP precision measurements) is particularly challenging at the LHC due to the vast QCD background. For $M_{\text{Higgs}} < 130$ GeV, decay is predominantly to a b anti- b quark pair, which makes it difficult to reconstruct because the total cross section for b anti- b production at the LHC will be $\sim 10^9$ times higher than the cross section for $H \rightarrow (b \text{ anti-} b)$.

We therefore require the Higgs to be produced in association with a top anti-top pair, in order that a high p_t lepton from the decay of one of the top quarks can be used as a trigger for Higgs candidate events.

Separating the Higgs signal from the myriad of background events is further achieved by the development and implementation of a cut-based analysis, optimizing the event reconstruction using information from b -tagging algorithms and implementing a channel-specific jet energy calibration.

Talk, Poster, or Talk & Poster

Talk

Primary author: Ms ASQUITH, Lily (University College London)**Presenter:** Ms ASQUITH, Lily (University College London)**Session Classification:** Parallel 2A: Collider Physics - Higgs

Contribution ID: 26

Type: **not specified**

Anomalous top coupling at the ILC - from the tools to the physics

Tuesday, 1 April 2008 11:13 (12 minutes)

After a brief description of the theory behind Wtb anomalous coupling we will follow with an overview of the vertexing and flavour tagging tools developed. Finally we will outline the usage of flavour tagging and charge reconstruction in the anomalous top coupling analysis.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr DEVETAK, Erik (Oxford University / RAL)

Presenter: Mr DEVETAK, Erik (Oxford University / RAL)

Session Classification: Parallel 2C: ILC Physics and Accelerator

Contribution ID: 27

Type: **not specified**

B_S->phiphi as a potential probe for New Physics at LHCb

Tuesday, 1 April 2008 11:50 (12 minutes)

The LHCb experiment, currently being commissioned at CERN, will perform precision measurements of mixing and decays in B-mesons. I will present studies on the decay B_s->phiphi, a channel in which physics beyond the Standard Model has the potential to affect parameters measurable at LHCb. An introduction to the channel will be given, including the physics of B-meson to Vector-Vector decays. Event selection based on the full LHCb Monte-Carlo data will be discussed, along with expected events yields for various integrated luminosity scenarios. Strategies for fitting the total weak phase, ϕ_s , and the transverse polarisation fraction, f_{\perp} , will be explored.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr STYLES, Nicholas (University of Edinburgh)**Presenter:** Mr STYLES, Nicholas (University of Edinburgh)**Session Classification:** Parallel 2B: Flavour Physics - LHC

Contribution ID: 28

Type: **not specified**

CP violation in the MSSM at the LHC

Wednesday, 2 April 2008 11:52 (12 minutes)

We consider the complex MSSM and examine whether and in which cases CP-violating phases will be observable at the LHC. We study Stop production and subsequent cascade decay into Neutralinos as the process for our investigation. It is found that asymmetries of up to 40% can be produced.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr TATTERSALL, Jamie (University of Durham)**Co-author:** Dr MOORTGAT-PICK, Gudrid (University of Durham)**Presenter:** Mr TATTERSALL, Jamie (University of Durham)**Session Classification:** Parallel 3A: Collider - BSM

Contribution ID: 29

Type: **not specified**

Lepton Number Violating mSUGRA and Neutrino Masses

Monday, 31 March 2008 15:43 (12 minutes)

We perform a quantitative study of neutrino phenomenology in the framework of minimal supergravity (mSUGRA) with grand unified theory (GUT)-scale tri-linear lepton number violation. The difficulties in obtaining the observed neutrino mass pattern are discussed, and we show that numerical fits are possible using two GUT scale lepton number violating parameters and three charged lepton mixing angles. We also discuss some phenomenological consequences of the models, such as tuning issues.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr KOM, Steve Chun-Hay (DAMTP, University of Cambridge)

Co-author: Dr ALLANACH, Ben (DAMTP, University of Cambridge)

Presenter: Mr KOM, Steve Chun-Hay (DAMTP, University of Cambridge)

Session Classification: Parallel 1C: Neutrino Physics

Contribution ID: 30

Type: **not specified**

The SciBooNE Experiment: Motivation, Construction and CCQE Analysis

Monday, 31 March 2008 15:56 (12 minutes)

The SciBooNE experiment is the newest neutrino experiment to be built at the Fermi National Accelerator Laboratory (FNAL), USA. The detector sits on-axis, 100 metres downstream of the target in the Booster Neutrino Beam-line.

Proposed in 2005, SciBooNE began its data run in June 2007 with completion projected for August 2008.

SciBooNE has a number of measurement goals, principally sub-GeV neutrino cross-section measurements in both neutrino and anti-neutrino mode, of interest to the T2K experiment which will begin running in Japan in April 2009.

An outline of the SciBooNE experiment, the construction and commissioning of the detectors, in particular the Muon Range Detector (MRD), will be presented along with a discussion on preliminary work towards making a Charged Current Quasi-Elastic (CCQE) cross-section measurement.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr WALDING, Joseph (Imperial College London)

Presenter: Mr WALDING, Joseph (Imperial College London)

Session Classification: Parallel 1C: Neutrino Physics

Contribution ID: 31

Type: **not specified**

Weak boson fusion

Tuesday, 1 April 2008 11:26 (12 minutes)

Higgs production via weak boson fusion (WBF) is both an excellent discovery channel and a source of valuable information about the structure of the coupling between weak bosons and a Higgs. WBF is examined in both the Standard Model and the MSSM, with particular emphasis on this coupling and its sensitivity to higher-order corrections.

Talk, Poster, or Talk & Poster

Talk

Primary author: PALMER, Sophy (University of Durham)**Co-authors:** Prof. WEIGLEIN, Georg (University of Durham); Dr FIGY, Terrance (University of Durham)**Presenter:** PALMER, Sophy (University of Durham)**Session Classification:** Parallel 2A: Collider Physics - Higgs

Contribution ID: 32

Type: **not specified**

A data driven measurement of W and Z boson production cross sections in ATLAS

Monday, 31 March 2008 15:43 (12 minutes)

An important aim of the LHC is the precise measurement of W and Z boson production cross sections, as these may be used to extract fundamental electroweak parameters as well as further test and constrain existing QCD models. In first data they may also be used as 'standard candle events' to understand detector performance. Any significant deviation from the predicted behaviour of these events could be one of the first indications of physics beyond the Standard Model, and so understanding these events is of paramount importance to new physics searches. It is important to make a data driven measurement of the cross sections and, whenever possible, not to rely on Monte Carlo simulation. Such a method of determining these cross sections in the ATLAS detector is outlined for the electron channel, with particular focus given to recent studies into a data driven determination of MET resolution and measurement of trigger efficiency.

Talk, Poster, or Talk & Poster

Talk and poster

Primary author: Ms DOBSON, Ellie (University of Oxford)**Presenter:** Ms DOBSON, Ellie (University of Oxford)**Session Classification:** Parallel 1A: Collider Physics - QCD and Electroweak**Track Classification:** Electroweak & Top Physics

Contribution ID: 33

Type: **not specified**

Acoustic Detection of Ultra High Energy Neutrinos

Monday, 31 March 2008 16:33 (12 minutes)

I will present the latest results in the acoustic detection of Ultra High Energy Neutrinos, focusing mainly on the work of the ACoRNE collaboration.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr BEVAN, Simon (UCL)

Presenter: Mr BEVAN, Simon (UCL)

Session Classification: Parallel 1C: Neutrino Physics

Contribution ID: 34

Type: **not specified**

Measuring Gamma with $B^0 \rightarrow D^0 K^* 0$ decays at LHCb

Tuesday, 1 April 2008 11:26 (12 minutes)

The LHCb experiment at the LHC is a single-armed spectrometer designed to pursue extensive, high precision studies of CP violation and rare phenomena in B decays.

The LHCb collaboration has studied various promising ways to determine the Unitarity Triangle angle Gamma.

In this contribution, the potential of the $B \rightarrow DK^*$

decays has been studied by employing the combined Gronau-London-Wyler (GLW) and the Atwood-Dunietz-Soni (ADS) methods, making use of a large sample of simulated data.

The expected sensitivity to the angle Gamma is presented.

Talk, Poster, or Talk & Poster

Talk

Primary author: NARDULLI, Jacopo (RAL)

Presenter: NARDULLI, Jacopo (RAL)

Session Classification: Parallel 2B: Flavour Physics - LHC

Contribution ID: 35

Type: **not specified**

POWHEG NLO matching in the Herwig++ Monte Carlo Event Generator

Monday, 31 March 2008 15:56 (12 minutes)

POWHEG is a novel method for combining fixed order NLO calculations with parton showers. In this work the scheme is fully implemented in the Herwig++ Event Generator for electron positron annihilation and Drell Yan vector boson production processes.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr TULLY, Jon (Durham University)**Presenter:** Mr TULLY, Jon (Durham University)**Session Classification:** Parallel 1A: Collider Physics - QCD and Electroweak**Track Classification:** QCD

Contribution ID: 36

Type: **not specified**

The LiCAS FSI subsystem current status and initial measurements

Tuesday, 1 April 2008 11:37 (12 minutes)

The Linear Collider Alignment and Survey (LiCAS) group has developed a Rapid Tunnel Reference Surveyor (RTRS), which will survey the reference network of the ILC to a high accuracy. By measuring small overlapping sections of the tunnel, the LiCAS RTRS will be capable of surveying the entire reference network in the main linac tunnel. The LiCAS RTRS has several measurement subsystems, one being the Frequency Scanning Interferometry (FSI) subsystem. The FSI subsystem has three components, the reference interferometers, the internal and the external FSI components. The current status and initial measurements from the LiCAS RTRS FSI subsystem will be discussed here.

Talk, Poster, or Talk & Poster

talk

Primary author: Mr DALE, John (University of Oxford)**Co-authors:** Dr REICHOLD, Armin (University of Oxford); Dr URIBE-ESTRADA, Cecilia (University of Oxford); Mr MOSS, Greg (University of Oxford); Dr GRZELAK, Grzegorz (University of Warsaw); Mr PRENTING, Johannes (DESY); Mr RAINBOW, Lee (University of Oxford); Mr JONES, Mark (University of Oxford); Mr SCHLOSSER, Markus (DESY); Mr TACON, Mike (University of Oxford); Dr BROCKILL, Patrick (University of Oxford); Dr COHEN, Sigal (University of Oxford); Mrs YANG, Stephanie (University of Oxford); Mr HANDFORD, Tony (University of Oxford); Dr HAN, Yanmei (University of Oxford)**Presenter:** Mr DALE, John (University of Oxford)**Session Classification:** Parallel 2C: ILC Physics and Accelerator

Contribution ID: 37

Type: **not specified**

W and Z Measurements with Initial CMS Data

Monday, 31 March 2008 16:09 (12 minutes)

Measurements of the inclusive cross-sections of W and Z in their leptonic decay modes will be among the first results from the LHC. An overview of the motivation and plans for such measurements with CMS will be presented, with emphasis on describing the use of data-driven methods for efficiency and background determination.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr WARDROPE, David (Imperial College London)

Presenter: Mr WARDROPE, David (Imperial College London)

Session Classification: Parallel 1A: Collider Physics - QCD and Electroweak

Contribution ID: 38

Type: **not specified**

Supersymmetric cascade decays and Higgs effects

Wednesday, 2 April 2008 11:39 (12 minutes)

The study of neutralino decays provides valuable information on the underlying MSSM parameters. Contributions from Higgs boson exchange can play an important role in parts of parameter space, particularly in CP violating scenarios. The effect of loop corrections in the Higgs and chargino-neutralino sectors is also considered.

Talk, Poster, or Talk & Poster

Talk

Primary author: Ms FOWLER, Alison (Durham University)**Co-author:** Prof. WEIGLEIN, Georg (Durham University)**Presenter:** Ms FOWLER, Alison (Durham University)**Session Classification:** Parallel 3A: Collider - BSM

Contribution ID: 39

Type: **not specified**

Technical challenges to measurements of the CP phase gamma at LHCb with B->DK decays where the D->KsPiPi

Tuesday, 1 April 2008 11:38 (12 minutes)

The large numbers of B-mesons produced in high energy proton-proton collisions inside the LHCb experiment at CERN will be exploited to measure precisely the CP violating phase gamma. I will discuss a method to probe gamma using decays of the form B->DK where the D->KsPiPi. The long flight distance of K0s necessitates a specialised fast reconstruction in order to exclusively trigger on this type of event.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr BRISBANE, Sean (CERN)

Presenter: Mr BRISBANE, Sean (CERN)

Session Classification: Parallel 2B: Flavour Physics - LHC

Contribution ID: 40

Type: **not specified**

Performance and Physics with the channel $B_s \rightarrow J/\psi$ ⊠ at ATLAS

Tuesday, 1 April 2008 12:05 (12 minutes)

The $B_s \rightarrow J/\psi \phi$ decay exhibits CP violation sensitive to physics beyond the Standard Model. In order to extract physics parameters it will be necessary to perform a simultaneous fit to both the mass and lifetime of the reconstructed decays. At low luminosities the measured parameters will be useful in detector performance and alignment sensitive tests while at higher luminosities it will be possible to measure the weak phase difference Φ_s .

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr DEWHURST, Alastair (Lancaster University)

Presenter: Mr DEWHURST, Alastair (Lancaster University)

Session Classification: Parallel 2B: Flavour Physics - LHC

Contribution ID: 41

Type: **not specified**

B-Mixing and $b \rightarrow s$ gamma in the Lee-Wick Standard Model

Wednesday, 2 April 2008 11:00 (12 minutes)

The Lee Wick Standard Model (LWSM) is an extension of the Standard Model and was recently proposed by Grinstein, O'Connell and Wise. It makes use of higher derivatives terms in the Lagrangian to introduce Lee-Wick states of negative norm. These heavy states (1TeV) cancel the quadratic divergences which arise due to the Higgs self-coupling. It is of interest to investigate the effects of this model in the flavour sector. Processes such as B_0 -mixing and $b \rightarrow s$ gamma can then be used to constrain the mass of these heavy Lee-Wick states. I will briefly summarise the LWSM and present results of calculations of B-mixing and $b \rightarrow s$ gamma in this model.

Talk, Poster, or Talk & Poster

Talk

Primary author: BHARUCHA, Aoife (Durham University)

Presenter: BHARUCHA, Aoife (Durham University)

Session Classification: Parallel 3B: Flavour Physics - LHC

Contribution ID: 42

Type: **not specified**

Reconstruction of Z->tautau->e+tau jet events using early data with CMS

Monday, 31 March 2008 16:22 (12 minutes)

We report on the selection and reconstruction strategy for Z->tautau->e+tau jet events, and their application in CMS with early data, as a benchmark for SUSY H/A->tautau->e+tau jet and tau tagging efficiency measurement. Using Monte Carlo simulated data, the performance of the reconstruction algorithms is evaluated. The number of expected signal and background events for 100 pb⁻¹ of integrated luminosity is estimated and data driven techniques for measuring efficiencies and background contributions are discussed.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr KONSTANTINOS, Petridis (Imperial College)

Presenter: Mr KONSTANTINOS, Petridis (Imperial College)

Session Classification: Parallel 1A: Collider Physics - QCD and Electroweak

Contribution ID: 43

Type: **not specified**

MINOS Electron Neutrino Appearance Analysis

Monday, 31 March 2008 16:09 (12 minutes)

MINOS is a long baseline neutrino experiment that sends a beam of muon neutrinos from the Fermi National Accelerator Laboratory to a Far Detector in Minnesota 735 km away. MINOS will be able to improve the limit on the neutrino mixing angle θ_{13} by searching for electron neutrino appearance resulting from the subdominant oscillation of muon neutrinos. This analysis will be discussed.

Talk, Poster, or Talk & Poster

Talk

Primary author: Ms HOLIN, Anna (University College London)

Presenter: Ms HOLIN, Anna (University College London)

Session Classification: Parallel 1C: Neutrino Physics

Contribution ID: 44

Type: **not specified**

Low tan beta MSSM Predictions for $B_s \rightarrow \mu^+ \mu^-$ at the LHC

Wednesday, 2 April 2008 11:13 (12 minutes)

One of the most promising signals of new physics at colliders is the rare decay $B_s \rightarrow \mu^+ \mu^-$. The LHC will be the first experiment to directly probe this loop- and helicity- suppressed decay channel down to the Standard Model prediction. Deviations from the predicted branching ratio are a signature of new particles in the loops. In particular, it is well known that the MSSM prediction scales as $(\tan \beta)^6$ due to the supersymmetric Higgs penguin diagrams, making this a fertile testing-ground for SUSY. In this study we analyse the MSSM prediction for $B_s \rightarrow \mu^+ \mu^-$ in the hertofore unexplored low tan beta region of the MSSM parameter space where interference with the box and Z-penguin diagrams could cause the branching ratio to dip below the Standard Model prediction. This decay is particularly important since it could be the first unambiguous signal of new physics at the LHC and also guide the future LHCb upgrade.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr TANEDO, Philip (Durham University / IPPP)**Co-authors:** Prof. DEDES, Athanasios (University of Ioannina); Prof. ROSIEK, Janusz (University of Warsaw)**Presenter:** Mr TANEDO, Philip (Durham University / IPPP)**Session Classification:** Parallel 3B: Flavour Physics - LHC

Contribution ID: 45

Type: **not specified**

Smearing of Monte Carlo simulated photon energies in the Babar Electromagnetic Calorimeter

Wednesday, 2 April 2008 11:00 (12 minutes)

“The photon energy resolution of the Electromagnetic Calorimeter of the BaBar detector at SLAC has been studied. The response of the calorimeter was investigated using single photons above 1 GeV from the reaction $e^+e^- \rightarrow \mu^+\mu^-\gamma$. Initially a discrepancy was observed between Data and Monte Carlo simulated events. A smearing technique has been developed to correct this discrepancy, based on the Student's t distribution. This smearing is validated using an analysis of $B \rightarrow K^*\gamma$, where a significant improvement in the agreement between Data and MC energy distributions is observed. This technique has been implemented as a standard correction for BaBar analyses. “

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr PARAMESVARAN, Sudarshan (Royal Holloway, University of London)

Presenter: Mr PARAMESVARAN, Sudarshan (Royal Holloway, University of London)

Session Classification: Parallel 3C: Detector

Contribution ID: 46

Type: **not specified**

LHCb RICH Alignment

Wednesday, 2 April 2008 11:13 (12 minutes)

I present an overview of the proposed alignment strategy for the Ring Imaging Cherenkov Detectors in the LHCb experiment. Small misalignments of optical components in the detectors can be determined from data and corrected for in the event reconstruction. Techniques to achieve this were validated on RICH Testbeam data. Simulated LHCb data was then used to determine the effects of individual misaligned components in order that an effective and efficient overall alignment strategy can be formed.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr CHRISTOPHER EDWARD, Eames (Imperial College London)**Presenter:** Mr CHRISTOPHER EDWARD, Eames (Imperial College London)**Session Classification:** Parallel 3C: Detector

Contribution ID: 47

Type: **not specified**

The Inclusive Jet Cross-Section at ATLAS (ApplGrid)

Monday, 31 March 2008 16:35 (12 minutes)

The ATLAS experiment will provide an opportunity to explore interactions at higher energies than previous detectors; allowing a test of standard model predictions, as well as opening the possibility of 'new physics' discoveries. The inclusive jet cross-section at high p_T is one measurement which may provide evidence of physics 'beyond the standard model', however a thorough understanding of uncertainties on its prediction and measurement is necessary. I will provide an overview of errors on the inclusive jet cross-section and discuss methods of using hadron-collider data in global PDF fits by use of integration grids (the ApplGrid project). I will also give a brief outline of the potential sensitivity to quark compositeness that ATLAS may be able to achieve.

Talk, Poster, or Talk & Poster

Talk and poster

Primary author: Mr CLEMENTS, Daniel Robert (University of Glasgow)

Presenter: Mr CLEMENTS, Daniel Robert (University of Glasgow)

Session Classification: Parallel 1A: Collider Physics - QCD and Electroweak

Contribution ID: 48

Type: **not specified**

Rare B to K^* $\mu\mu$ Decays at LHCb

Wednesday, 2 April 2008 11:26 (12 minutes)

The study of rare B meson decays with the LHCb detector is expected to be one of the highlights of the first phase of LHC physics analysis. The forward-backward asymmetry of the decay B_d to $K^* \mu\mu$ is very sensitive to New Physics beyond the Standard Model. Recent work on optimizing the selection of the decay will be presented.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr SKOTTOWE, Hugh (University of Cambridge)**Presenter:** Mr SKOTTOWE, Hugh (University of Cambridge)**Session Classification:** Parallel 3B: Flavour Physics - LHC

Contribution ID: 49

Type: **not specified**

K2K nu_mu disappearance analysis with an expanded fiducial volume at Super-Kamiokande

Monday, 31 March 2008 16:21 (12 minutes)

Measurements of two flavor ν_μ disappearance were made using K2K, the KEK to Kamioka long baseline neutrino oscillation experiment, data for three fiducial volume definitions at the far detector, Super-Kamiokande. A study was conducted on expanding the fiducial volume at Super-Kamiokande to show it is possible to expand it both symmetrically and shifted in the incoming neutrino beam direction. For the fiducial volume definitions, 112, 143, and 140 events are observed with an expectation of $158.1^{+9.2}_{-8.6}$, $183.3^{+10.7}_{-10.0}$, and $170.9^{+9.5}_{-9.0}$ events, respectively. A distortion is also seen in the reconstructed energy spectrum for single ring muon-like events for each fiducial volume. The probability that the observations are explained by no neutrino oscillations are 0.0021% (4.3σ), 0.018% (3.7σ), and 0.042% (3.5σ). The best fit values are $\sin^2 2\theta=1.0$ for all definitions and $\Delta m^2=0.0027$ eV², 0.0025 eV², and 0.0024 eV², respectively. All results are consistent with other disappearance measurements.

Talk, Poster, or Talk & Poster

Talk

Primary author: TERRI, Ryan (Queen Mary, Univeristy of London)**Presenter:** TERRI, Ryan (Queen Mary, Univeristy of London)**Session Classification:** Parallel 1C: Neutrino Physics

Contribution ID: 50

Type: **not specified**

A Laser-Based Beam Density Distribution Diagnostic for the RAL Front End Test Stand

Wednesday, 2 April 2008 11:25 (12 minutes)

The RAL Front End Test Stand is being constructed to demonstrate the production of a 60 mA, 3 MeV, 50 pps, chopped H⁻ beam suitable for future high-power proton accelerators.

Due to the high beam brightness and a desire to have online instrumentation while the accelerator is operational, a series of non-intrusive, non-destructive diagnostics, based on the photo-detachment of the outer electrons of the H⁻ ions, are being developed. This talk describes a device that will measure the 2D ion beam density distribution, due to be installed in the summer.

Talk, Poster, or Talk & Poster

Talk

Primary author: LEE, David (Imperial College London)

Co-authors: GABOR, Christoph (ASTeC, STFC); POZIMSKI, Jürgen (Imperial College London)

Presenter: LEE, David (Imperial College London)

Session Classification: Parallel 3C: Detector

Contribution ID: 51

Type: **not specified**

Realistic Reconstruction of top Quark Pairs for the ILC

Tuesday, 1 April 2008 11:25 (12 minutes)

Reconstruction and analysis of simulated top quark pair events for the future 500 GeV electron positron linear collider ILC are discussed. A detailed GEANT-based simulation of the ILC detector concept LDC is used. The reconstruction is performed with realistic tracking, vertex reconstruction, particle flow and jet finding algorithms. Reconstructed properties of the top quark are compared with performance expectations for the ILC.

Talk, Poster, or Talk & Poster

Talk

Primary author: Ms PINTO JAYAWARDENA, Talini (STFC Rutherford Appleton Laboratory)

Presenter: Ms PINTO JAYAWARDENA, Talini (STFC Rutherford Appleton Laboratory)

Session Classification: Parallel 2C: ILC Physics and Accelerator

Contribution ID: 52

Type: **not specified**

Development of wavelength shifters for the ArDM Argon Dark Matter detector

Wednesday, 2 April 2008 11:37 (12 minutes)

The Argon Dark Matter (ArDM) is a 1-ton two phase liquid/gaseous argon scintillation/ionisation WIMP detector. The primary VUV scintillation light of argon (wavelength 128 nm) needs to be shifted to visible light in order to match the sensitivity range of the photomultiplier tubes. We discuss results from the development and optimization of wavelength shifters based on the organic scintillator tetraphenyl butadiene (TPB).

Talk, Poster, or Talk & Poster

Talk

Primary author: MAVROKORIDIS, Konstantinos (University of Sheffield)

Presenter: MAVROKORIDIS, Konstantinos (University of Sheffield)

Session Classification: Parallel 3C: Detector

Contribution ID: 53

Type: **not specified**

Time-Dependent Dalitz Plot Analysis of $B^0 \rightarrow K^{\pm} \pi^{\mp}$ Decays

Monday, 31 March 2008 16:09 (12 minutes)

We perform a time-dependent Dalitz plot analysis of $B^0 \rightarrow K^{\pm} \pi^{\mp}$ in order to extract the CP violation parameters of $f_0(980)K^{\pm}$ and $\rho(770)K^{\pm}$ and direct CP-asymmetries of $K^{\pm}(892)\pi^{\mp}$. The results are obtained from a data sample of $(383 \pm 3) \times 10^6$ $B\bar{B}$ decays, collected with the BABAR detector at the PEP-II asymmetric-energy B Factory at SLAC. The measured values of $2\beta_{\text{eff}}$ in B^0 decays to $f_0(980)K^{\pm}$ and $\rho(770)K^{\pm}$ are $(89 \pm 22 \pm 20 \pm 5 \pm 8)$ degrees and $(37 \pm 19 \pm 17 \pm 5 \pm 6)$ degrees, respectively, where the first quoted uncertainty is statistical, the second is systematic and the third is Dalitz plot signal model uncertainty. We measure the significance of $2\beta_{\text{eff}}(f_0(980)K^{\pm}) \neq 0$ to be 4.3 sigma.

In decays to $K(892)\pi$ we find $ACP = -0.18 \pm 0.10 \pm 0.03 \pm 0.03$. The measured phase difference between the decay amplitudes of $B^0 \rightarrow K^+(892)\pi^-$ and $B^0 \rightarrow K^-(892)\pi^+$ is $(-164 \pm 24 \pm 12 \pm 15)$ degrees.

Talk, Poster, or Talk & Poster

Talk

Primary authors: PEREZ, Alejandro (Universite Paris VI et VII); BEN-HAIM, Eli (Universite Paris VI et VII); MOHANTY, Gagan Bihari (University of Warwick); ILIC, Jelena (University of Warwick); OCARIZ, Jose (Universite Paris VI et VII); GRAHAM, Mathew (Stanford Linear Accelerator Center); PIERINI, Maurizio (University of Wisconsin); SONI, Nitesh (University of Birmingham); DEL AMO SANCHEZ, Pablo (Universite Paris VI et VII); LATHAM, Thomas (University of Warwick); GERSHON, Timothy (University of Warwick)

Presenter: ILIC, Jelena (University of Warwick)

Session Classification: Parallel 1B: Flavour Physics B-factory and Tevatron

Contribution ID: 54

Type: **not specified**

The use of crab cavities in colliders to increase luminosity

Tuesday, 1 April 2008 11:49 (12 minutes)

Crab cavities have been proposed at a number of particle colliders to increase the luminosity in the presence of a crossing angle, including the LHC upgrade, ILC and CLIC colliders. These RF devices rotate the incoming bunches prior to collision in order to provide a head-on collision. However if the phase and amplitude is sufficiently unstable the crab cavities can cause a decrease rather than an increase of luminosity. In addition wake field instabilities can also reduce the luminosity of the collider. The effects of these instabilities as well as cavity alignment on the peak luminosity has been studied using the beam tracking code PLACET combined with the code GUINEA-PIG to simulate collisions, as well as using analytical techniques to calculate the variations in luminosity.

Talk, Poster, or Talk & Poster

Talk

Primary author: Dr BURT, Graeme (Lancaster University/ Cockcroft)**Co-authors:** Dr DEXTER, Amos (Lancaster University/ Cockcroft); Mr TAHIR, Imran (Lancaster university/ Cockcroft); Mr MCINTOSH, Peter (STFC); Dr GOUDKET, Philippe (STFC)**Presenter:** Dr BURT, Graeme (Lancaster University/ Cockcroft)**Session Classification:** Parallel 2C: ILC Physics and Accelerator

Contribution ID: 55

Type: **not specified**

Bs->J/Psi Phi and Misalignment in the ATLAS Detector

Tuesday, 1 April 2008 12:18 (12 minutes)

The decay of Bs->J/Psi Phi is parameterised by 8 variables, which we obtain from data using a maximum likelihood fit. The effect of systematic errors, particularly from detector resolution and misalignment, will significantly impact the accuracy of this fit. I investigate using lifetime measurements to estimate these errors.

Talk, Poster, or Talk & Poster

Talk

Primary author: DAVIDSON, Ruth (Physics Department)**Presenter:** DAVIDSON, Ruth (Physics Department)**Session Classification:** Parallel 2B: Flavour Physics - LHC

Contribution ID: 56

Type: **not specified**

The RAL Front End Test Stand

High-power proton accelerators with beam powers in the megawatt range have many applications including high intensity neutrino sources and spallation neutron sources. The RAL Front End Test Stand (FETS) is being constructed to demonstrate production of a 60 mA, 3 MeV, 50 pps, chopped H⁻ beam suitable for such future accelerators. This poster gives a description and status report of the various components (H⁻ ion source, magnetic low energy beam transport, radio frequency quadrupole accelerator, high speed beam chopper and a comprehensive suite of diagnostics) of the FETS.

Talk, Poster, or Talk & Poster

Poster

Primary author: LEE, David (Imperial College London)

Presenter: LEE, David (Imperial College London)

Contribution ID: 57

Type: **not specified**

Photosensors for the T2K 280m Near Detector

Wednesday, 2 April 2008 12:13 (12 minutes)

The T2K long baseline neutrino oscillation experiment will fire a neutrino beam from the JPARC facility on the east coast of Japan, 295km to the Super Kamiokande detector. At a distance of 280m from the neutrino beam source a Near Detector will be used to parametrise the beam. The optical channels of the 280m Near Detector will be instrumented using a relatively new photosensor, the Geiger-mode Multipixel APD.

A study detailing the operational parameters of Hamamatsu MPPCs will be presented.

Talk, Poster, or Talk & Poster

Talk

Primary author: WARD, Mark (University Of Sheffield)**Presenter:** WARD, Mark (University Of Sheffield)**Session Classification:** Parallel 3C: Detector

Contribution ID: 58

Type: **not specified**

Higgs studies at a future electron-positron collider

Tuesday, 1 April 2008 12:05 (12 minutes)

An electron-positron collider would provide a tool for incredibly precise measurements of the discoveries made at the LHC. This talk will discuss the applications to Higgs physics, and how the excellent vertexing capabilities at such a collider would be able to distinguish between many physics models, through the measurement of the Higgs branching ratios.

Talk, Poster, or Talk & Poster

Talk

Primary author: GRIMES, Mark (University of Bristol)**Presenter:** GRIMES, Mark (University of Bristol)**Session Classification:** Parallel 2A: Collider Physics - Higgs

Contribution ID: 59

Type: **not specified**

The T2K 280m Near Detector P0DECAL

Wednesday, 2 April 2008 11:49 (12 minutes)

The T2K experiment will fire an intense neutrino beam from the JPARC facility on the east coast of Japan to the Super Kamiokande detector 295km to the west. To measure the sub dominant θ_{13} lepton mixing angle, Super Kamiokande will detect the appearance of electron flavour neutrinos from the originally >99% pure Muon neutrino beam.

One of the major backgrounds to this electron neutrino signal is that of neutral current single neutral pion production (NC1p). The cross-section of this process is little understood at the energies employed by T2K. The T2K near detector (ND280), situated at 280m from beam production, will characterise the neutrino beam and measure the electron neutrino background processes.

The Pi-Zero Detector (P0D) inside the ND280 is dedicated to measuring the NC1p cross section. To improve the systematics and statistics of NC1p vertex detection the P0D will be surrounded by an electromagnetic calorimeter (P0DECAL). In this talk I discuss the design of the P0DECAL using MC simulation data.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr STILL, Benjamin (University of Sheffield)**Presenter:** Mr STILL, Benjamin (University of Sheffield)**Session Classification:** Parallel 3C: Detector

Contribution ID: 60

Type: **not specified**

Electro-optic detection of Longitudinal Bunch Profile Measurements at FLASH

We have installed an electro-optic experiment for single-shot, non destructive measurements of the longitudinal electric field charge distribution of individual electron bunches at FLASH, DESY. The electron bunch profile is encoded on a stretched Ti:Sapphire laser pulse through the interaction of an electro-optic crystal. This profile is retrieved from a cross-correlation of the encoded pulse with a 35 fs laser pulse, obtained from the same laser. At FLASH, sub- 100fs electron bunches have been measured during FEL operation with a resolution of better than 50 fs. We have also benchmarked this measurement with a transverse deflecting cavity.

Talk, Poster, or Talk & Poster

Poster

Primary author: Dr PHILLIPS, Paul (Dundee University)

Co-authors: Dr VAN DER MEER, Alexander (FOM Rijnhuizen, Nieuwegein); Prof. GILLESPIE, Alan (Dundee University); Dr SCHMIDT, Bernard (DESY, Hamburg); Dr STEFFEN, Bernd (DESY, Hamburg); Dr BERDEN, Giel (FOM Rijnhuizen, Nieuwegein); Dr SCHLARB, Holger (DESY, Hamburg); Dr SCHMUSER, Peter (DESY, Hamburg); Dr JAMISON, Steve (STFC/DL/ASTEC Daresbury); Dr ARSOV, Vladimir (DESY, Hamburg)

Presenter: Dr PHILLIPS, Paul (Dundee University)

Contribution ID: 61

Type: **not specified**

MPPC Testing for the ND280 ECAL

The 280m Near Detector component of the T2K long-baseline neutrino experiment is largely based upon scintillator technology. Scintillator light is read out by a novel detector, the Multi-Pixel Photon Counter (MPPC), marketed by Hamamatsu Photonics. These devices are solid-state photodetectors operated in Geiger mode, and exhibit large, stable gain (of order $1E6$). Extensive tests on these devices have now been performed, in order to characterise the properties of MPPCs to enable precise modelling, and to prepare for production-scale QA. The results of these tests are presented.

Talk, Poster, or Talk & Poster

Poster

Primary author: Mr HAIGH, Martin (University of Warwick)

Co-authors: Dr VACHERET, Antonin (Imperial College London); Mr CARVER, Antony (University of Warwick); Dr BARKER, Gary (University of Warwick)

Presenter: Mr HAIGH, Martin (University of Warwick)

Contribution ID: 62

Type: **not specified**

The CMS L1 trigger: from LHC to SLHC

Monday, 31 March 2008 16:48 (12 minutes)

The LHC has been described as a statistics machine, using very high interaction rates to compensate for the very low cross-sections of 'new'(interesting) physical processes. Were the detector to be read out continually a data rate of around 5×10^7 Mbyte/s (~ 50 Tbyte/s) would be routine, the vast majority of which is of no interest. To reduce this to a storable (100MByte/s) rate, two levels of triggering are used; the Level-1 trigger (custom hardware) and the Higher-Level Trigger (software).

I discuss here the current level-1 trigger architecture, the complications introduced by the increased luminosity of the proposed accelerator upgrade (SLHC) and several solutions currently under investigation.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr ANDREW WILLIAM, Rose (Imperial College - University of London)

Presenter: Mr ANDREW WILLIAM, Rose (Imperial College - University of London)

Session Classification: Parallel 1A: Collider Physics - QCD and Electroweak

Contribution ID: 63

Type: **not specified**

Measurement of the branching fraction $\text{Br}(\text{Bs} \rightarrow \text{Ds}^* \text{Ds}^*)$ by the D0 Experiment

Monday, 31 March 2008 16:22 (12 minutes)

The measurement is reported of the branching fraction $\text{Br}(\text{Bs} \rightarrow \text{Ds}^* \text{Ds}^*)$ using a data sample corresponding to 1.3 fb^{-1} of integrated luminosity collected by the D0 experiment in 2002-2006 during Run II of the Fermilab Tevatron Collider. One Ds^* meson was *partially reconstructed in the decay* $\text{Ds}^* \rightarrow \phi \mu \nu$, and the other Ds^* meson was identified using the decay $\text{Ds}^* \rightarrow \phi \pi$ where no attempt was made to distinguish Ds^* and Ds^* states.

The resulting measurement of $\text{Br}(\text{Bs} \rightarrow \text{Ds}^* \text{Ds}^*)$ was subsequently used to estimate the width difference $\Delta \Gamma_{\text{CP}}^{\text{s}}$ in the Bs - Bs^* system: $\Delta \Gamma_{\text{CP}}^{\text{s}} / \Gamma_{\text{s}}$.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr WALDER, James (Lancaster University)

Presenter: Mr WALDER, James (Lancaster University)

Session Classification: Parallel 1B: Flavour Physics B-factory and Tevatron

Contribution ID: 64

Type: **not specified**

Particle Identification in the ND280 ECAL

The ECAL in T2K's 280m Near Detector is a Lead/scintillator tracking calorimeter. The relatively coarse resolution of such a detector makes a comprehensive particle identification a challenging task. This poster describes a particle identification algorithm that has been developed for the ECAL subdetector. The algorithm can separate tracks from showering particles and work is ongoing to distinguish between Hadronic and Electromagnetic showers.

Talk, Poster, or Talk & Poster

Poster

Primary author: Mr CARVER, Antony (Warwick University)

Co-authors: Mr TAYLOR, Ian (Imperial College London); Dr BACK, John (Warwick University); Dr BOYD, Steve (Warwick University)

Presenter: Mr CARVER, Antony (Warwick University)

Contribution ID: 65

Type: **not specified**

Measurement of CP and production asymmetries with $B_s \rightarrow D_s \mu \nu$ decays at LHCb

Wednesday, 2 April 2008 11:39 (12 minutes)

The CP asymmetry in B_s - B_s bar mixing is sensitive to new Physics. This can be probed from measurement of the time dependent charge asymmetry. This method also allows measurement of the B_s - B_s bar production asymmetry. This talk describes an approach for making this measurement at LHCb. The B_s lifetimes are calculated using energy and momentum conservation considerations. This results in a two-fold ambiguity of the lifetime. Methods for dealing with the two solutions are presented as well as the resulting measurements of the CP and production asymmetry.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr LESSNOFF, Kenneth (University of Bristol)

Presenter: Mr LESSNOFF, Kenneth (University of Bristol)

Session Classification: Parallel 3B: Flavour Physics - LHC

Contribution ID: 66

Type: **not specified**

First observation of the excited B_s^{2*} meson at D0

Monday, 31 March 2008 16:35 (12 minutes)

Recently, CDF and D0 simultaneously reported the world's first ever observation of the B_s^{2*} meson, a narrow, orbitally-excited state of the B_s meson. I will describe D0's efforts to reconstruct and study this particle in decays to $B+K^-$ ($B^+ \rightarrow J/\psi K^+$), and the fitting procedure used to determine the B_s^{2*} mass ($5839.6 \pm 1.1 \pm 0.7$ MeV). In addition, the production rate of the B_s^{2*} relative to the B^+ is measured for the first time.

These results will be compared with those for the B^ mesons (narrow orbitally-excited states of the B^0), which were observed and measured for the first time last year at D0.*

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr WILLIAMS, Mark (Lancaster University)

Presenter: Mr WILLIAMS, Mark (Lancaster University)

Session Classification: Parallel 1B: Flavour Physics B-factory and Tevatron

Contribution ID: 67

Type: **not specified**

Depolarization effects at the interaction point of a linear collider

Tuesday, 1 April 2008 12:13 (12 minutes)

Depolarization effects at the interaction point of a linear collider are analyzed. The main effects occur during the intense beam-beam interactions. Higher-order effects as well as theoretical improvements in the derivation of suitable equations are given. Updates on existing simulation programs are reported. Numerical results for the design of the International Linear Collider (ILC) and the Compact Linear Collider (CLIC) are discussed.

Talk, Poster, or Talk & Poster

Talk

Primary author: Dr HARTIN, Anthony (Oxford University)**Co-authors:** Dr MOORTGAT-PICK, Gudrid (IPPP, University of Durham); Dr BAILEY, Ian (Cockcroft Institute)**Presenter:** Dr HARTIN, Anthony (Oxford University)**Session Classification:** Parallel 2C: ILC Physics and Accelerator

Contribution ID: 68

Type: **not specified**

An unbinned method to extract the Forward-Backward Asymmetry of $B_d \rightarrow K^* \mu^+ \mu^-$ decay on LHCb

Wednesday, 2 April 2008 11:52 (12 minutes)

The $B_d \rightarrow K^* \mu^+ \mu^-$ decay occurs via the FCNC process in the Standard Model (SM) with a branching ratio calculated to be $11.9 \pm 3.9 \times 10^{-7}$. It has been already measured in previous experiments and the obtained value is of the order of $12.2^{+5.8}_{-5.2} \times 10^{-7}$. A set of important quantities such as dimuon mass spectra and the forward-backward asymmetry (FBA) can be measured with this decay in order to test the SM and search for new Physics. In this work we propose an unbinned method to evaluate these distributions using a non-parametric approach. This study has also been carried out to evaluate of the zero point of the FBA distribution and its resolution. Such values were estimated to be $4.04 \pm 0.4 \text{ GeV}^2/c^4$. Acceptance effects and background issues are also addressed.

Talk, Poster, or Talk & Poster

Talk & Poster

Primary author: Mr MARINHO, Franciole (University of Glasgow)**Presenter:** Mr MARINHO, Franciole (University of Glasgow)**Session Classification:** Parallel 3B: Flavour Physics - LHC

Contribution ID: 69

Type: **not specified**

The effect of electromagnetic backgrounds on an IP feedback system at ILC and CLIC

Tuesday, 1 April 2008 12:25 (12 minutes)

Experiment T-488 at SLAC, End Station A recorded distorted BPM voltage signals due to the impingement of background e+, e- and gamma particles on the BPM striplines. Simulations agreed with the experiment to show that the impact of background pairs at the level expected at the ILC would be negligible. However for CLIC default parameters (centre of mass $E=3$ TeV, $s_x/s_y=53/1$ nm, $e_x/e_y=660/20$ nm rad) an error due to secondary emission from the IP BPM strips would lead to a position error of 5%

Talk, Poster, or Talk & Poster

Talk

Primary author: Dr HARTIN, Anthony (Oxford University)

Co-authors: Ms SWINSON, Christina (Oxford University); Ms CLARKE, Christine (Oxford University); Prof. BURROWS, Philip (Oxford University)

Presenter: Ms CLARKE, Christine (Oxford University)

Session Classification: Parallel 2C: ILC Physics and Accelerator

Contribution ID: 70

Type: **not specified**

Patterns of Gauge Mediation in Metastable Supersymmetry Breaking

Wednesday, 2 April 2008 12:18 (12 minutes)

It can be argued that in generic models of low scale supersymmetry breaking (where gravity effects can be neglected) metastability is inevitable. Accepting this fact allows one to build simple and concrete models of gauge mediated supersymmetry breaking. We exhibit a compact model of direct gauge mediation and its resulting MSSM phenomenology, which is able to interpolate between the standard gauge mediation scenario and split susy models.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr DURNFORD, Callum (Durham University)**Presenter:** Mr DURNFORD, Callum (Durham University)**Session Classification:** Parallel 3A: Collider - BSM

Contribution ID: 71

Type: **not specified**

CRESST to EURECA: Progress with cryogenic dark matter searches

Monday, 31 March 2008 16:48 (12 minutes)

EURECA is a proposed dark matter experiment which will use cryogenic detector technology pioneered by the CRESST and EDELWEISS projects. This will use up to 1 tonne absorber mass made from multiple materials to search for the elastic scattering of neutralino WIMPs with a cross section down to 10^{-10} pb. The CRESST experiment is currently running. It will search down to 10^{-8} pb and provides a test facility to develop ideas for EURECA.

Talk, Poster, or Talk & Poster

Talk

Primary author: Dr HENRY, Samuel (University of Oxford)

Presenter: Dr HENRY, Samuel (University of Oxford)

Session Classification: Parallel 1C: Neutrino Physics

Contribution ID: 72

Type: **not specified**

Energy Reconstruction in the ND280 ECAL

A Lead-Scintillator Calorimeter is now in construction for use in the 280m Near-Detector, being built as part of the T2K long baseline experiment. Like in any Calorimeter, accurate Energy Reconstruction is a challenging necessity. This poster will describe the Energy Reconstruction fitter being produced for use in the Calorimeter.

Talk, Poster, or Talk & Poster

Poster

Primary authors: Dr MCCAULEY, Neil (colleague); Mr MARYON, Tom (colleague)

Presenter: Mr MARYON, Tom (colleague)

Contribution ID: 73

Type: **not specified**

Search for Associated Production of Z and Higgs Bosons in $n\nu n\bar{b}b$ Final States

Tuesday, 1 April 2008 11:13 (12 minutes)

We present a search for a light Standard Model Higgs Boson produced in association with a Z boson decaying invisibly into a pair of neutrinos. The final state is characterised by a presence of two b-tagged jets from the Higgs Boson decay and a large imbalance in the transverse energy of the event. The search has been performed using data collected by the D0 experiment at Fermilab. This channel is challenging as the decay signatures are common in QCD and instrumental backgrounds.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr CHRISTOUDIAS, Theo (Imperial College)**Presenter:** Mr CHRISTOUDIAS, Theo (Imperial College)**Session Classification:** Parallel 2A: Collider Physics - Higgs

Contribution ID: 74

Type: **not specified**

a_{fs} at LHCb: illuminating new physics

Wednesday, 2 April 2008 12:05 (12 minutes)

This summer the Large Hadron Collider beauty experiment, LHCb, will start its ambitious physics programme: to make precision measurements at the Large Hadron Collider. With 10^{12} b-quarks produced in each 2fb^{-1} (~1 year) LHCb has the opportunity to perform very precise measurements of b-quark physics with much more copious samples of decays than currently available.

In the measurement of the parameter called the flavour-specific asymmetry, a_{fs} , LHCb could discover unknown new physics. a_{fs} will be measured separately for the first time in the channels $B_s^0 \rightarrow D_s \pi$, $B_s^0 \rightarrow D_s \mu \nu$, and $B_d^0 \rightarrow D \mu \nu$. Hints of supersymmetry, or even so-called unparticles could be detected as we enter the LHC era.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr LAMBERT, Robert (Edinburgh LHCb)**Presenter:** Mr LAMBERT, Robert (Edinburgh LHCb)**Session Classification:** Parallel 3B: Flavour Physics - LHC

Contribution ID: 75

Type: **not specified**

Probing CP violation in Bs mixing

Wednesday, 2 April 2008 12:18 (12 minutes)

The LHCb experiment will offer a precise hadronic probe with which to study CP violation and possible New Physics (NP) effects in the Bs system. For example from $B_s \rightarrow J/\psi \phi$ decays, it will be possible to measure the CP violating weak phase, ϕ_{13} . This phase owing to its small Standard Model (SM) prediction, -0.04 rad, will provide a sensitive indicator to NP occurring at the TeV scale. The analysis of $B_s \rightarrow J/\psi \phi$ decays requires using its decay angular information to separate out the CP eigenstates. The sensitivity to ϕ_{13} can then be extracted from the angular differential rate for this mode. Previous studies have shown this sensitivity using reduced expression for the decays rates. But by studying the full expression, we find both a quantitative and qualitative improvement in the precision with which ϕ_{13} is obtained. This talk, in preparation for data taking at the LHCb, presents this expected improvement.

Talk, Poster, or Talk & Poster

Talk

Primary author: MC LEAN, Colin David (Edinburgh)**Co-authors:** Dr OSORIO, Andres (Edinburgh); Prof. CLARKE, Peter (Edinburgh)**Presenter:** MC LEAN, Colin David (Edinburgh)**Session Classification:** Parallel 3B: Flavour Physics - LHC

Contribution ID: 76

Type: **not specified**

Trilepton SUSY signatures at ATLAS

Wednesday, 2 April 2008 12:05 (12 minutes)

The trilepton signature is one of the ‘golden’ channels for SUSY due to its striking signature of three leptons and missing energy in the final state. The classic trilepton SUSY signature is gaugino pair production and decay via virtual Z and W bosons to three leptons, neutrinos and the LSP. The Tevatron collider at Fermilab has been looking for these events using proton-antiproton collisions at a centre of mass energy of 1.96 TeV. The D0 and CDF experiments have observed no excess of candidates of the classic SUSY trilepton signature with respect to the Standard Model prediction. The LHC will be colliding protons at seven times the energies of the Tevatron and at luminosities 100 times higher, greatly increasing the possibility of observing a trilepton SUSY signature. Trilepton signatures are incredibly important to ATLAS, despite their low statistics, since backgrounds are greatly reduced by the clean leptonic event topology, and the application of a minimal number of event selection cuts could yield a SUSY discovery signal at the LHC.

Talk, Poster, or Talk & Poster

Trilepton SUSY signatures at ATLAS

Primary author: Ms POTTER, Christina (RHUL)**Presenter:** Ms POTTER, Christina (RHUL)**Session Classification:** Parallel 3A: Collider - BSM

Contribution ID: 77

Type: **not specified**

Higgs self coupling sensitivity at ILC

Tuesday, 1 April 2008 11:52 (12 minutes)

The Higgs self coupling is a precision measurement that LHC cannot produce. A linear collider detector must be able to perform such measurement therefore this channel can be used as a benchmark to optimize the detector design. The challenge of this analysis is the overwhelming tt background. In order to reduce it, a cut based and a neural network analysis have been performed. After an introduction describing the ILC detector concept and the ZHH channel, I will present results of both analysis.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr FAUCCI GIANNELLI, Michele (Royal Holloway University of London)**Presenter:** Mr FAUCCI GIANNELLI, Michele (Royal Holloway University of London)**Session Classification:** Parallel 2A: Collider Physics - Higgs

Contribution ID: 78

Type: **not specified**

Construction of an Electromagnetic Calorimeter for ND280 and the T2K collaboration

Wednesday, 2 April 2008 12:01 (12 minutes)

T2K (Tokai to Kamioka) is a 295km long-baseline neutrino experiment in Japan, which is due to start taking commissioning data late in 2009. It is designed to measure muon-neutrino oscillations to other flavours. This will enable the measurement of some of the components of the MNSP mixing matrix. One of the UK's main contributions is the construction of an Electromagnetic Calorimeter (ECal) for the near detector, ND280, situated 280m downstream from the neutrino production target. This talk will present an update on construction of one of the ECal modules for ND280, the Downstream ECal, which is being built at Lancaster University. In addition, quality assurance tests of the scintillator bars will be discussed.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr DAVIES, Gavin (Lancaster University)

Co-authors: Dr HATZIKOUTELIS, Athans (Lancaster University); Dr KORMOS, Laura (Lancaster University)

Presenter: Mr DAVIES, Gavin (Lancaster University)

Session Classification: Parallel 3C: Detector

Contribution ID: 79

Type: **not specified**

T2K (Tokai To Kamiokande)

The Tokai to Kamioka (T2K) experiment is a long baseline neutrino oscillation experiment.

An intense neutrino beam from the J-PARC facility in Tokai will be sent 295 km across Japan towards the Super Kamiokande detector in Kamioka.

T2K is expected to start taking data in 2009.

The main objectives of the first stage of the T2K experiment are the search of muon into electron neutrino oscillation and a precision measurement of θ_{23} and Δm_{21}^2 .

Compared to the current experimental results, one order of magnitude improvement in all three measurements are expected.

The properties of the neutrino beam at Tokai, before it can oscillate, will be studied by the ND280 experiment.

This poster will give an overview of the T2K experiment and its goals.

Talk, Poster, or Talk & Poster

Poster

Primary author: Ms GEORGE, Melissa (Queen Mary University of London)

Presenter: Ms GEORGE, Melissa (Queen Mary University of London)

Contribution ID: **80**Type: **not specified**

Polarised Positron Sources for Future Linear Colliders

The designs for both the International Linear Collider (ILC) and the Compact Linear Collider (CLIC) envisage the need for of order 10^{14} positrons per second, two orders of magnitude greater than the rates delivered at the Stanford Linear Collider (SLC). This extrapolation requires novel technologies to keep the stresses placed on the conversion targets to manageable levels. At the same time, it has been recognised that it is highly-desirable to be able to deliver both polarised electrons and polarised positrons to the interaction point(s) of the colliders in order to maximise the physics reach of the machines.

Here I present the status of the two leading technologies for generating intense beams of polarised positrons: helical undulator insertion devices and laser Compton scattering techniques, with emphasis on work carried out by the HeLiCal collaboration in developing the baseline positron source for the ILC.

Talk, Poster, or Talk & Poster

Poster

Primary author: Dr BAILEY, Ian (University of Liverpool)

Presenter: Dr BAILEY, Ian (University of Liverpool)

Contribution ID: 81

Type: **not specified**

A Micron-Scale Laser-Based Beam Profile Monitor for High Luminosity Particle Accelerators

Tuesday, 1 April 2008 12:01 (12 minutes)

Transverse beam size diagnostics systems are essential for luminosity and beam property optimisation of low emittance beams. The laser-wire (LW) system in the extraction line at the Accelerator Test Facility (ATF) at KEK aims to achieve micron-scale electron beam profile measurements. This is done by colliding high energy laser pulses with an electron beam and monitoring the inverse Compton scattering rate. Recent upgrades to the LW system, including custom lens, chamber movers, laser optics and data acquisition are presented together with recent results.

Talk, Poster, or Talk & Poster

Talk

Primary author: Mr DEACON, Lawrence (John Adams Institute at RHUL, London, U.K.)

Co-authors: Dr BOSCO, Alessio (John Adams Institute at RHUL, London); Dr ARYSHEV, Alexander (John Adams Institute at RHUL); Dr FOSTER, Brian (John Adams Institute at Oxford); Dr HOWELL, David (John Adams Institute at Oxford); Dr GANNAWAY, Fred (John Adams Institute at Oxford); Mr BOORMAN, Gary (John Adams Institute at RHUL, London); Prof. BLAIR, Grahame (John Adams Institute at RHUL, London); Dr HAYANO, Hitoshi (KEK, Ibaraki, Japan); Prof. URAKAWA, Junji (KEK, Ibaraki, Japan); Dr KUBO, Kiyoshi (KEK, Ibaraki, Japan); Dr CORNER, Laura (John Adams Institute at Oxford); Mrs NEWMAN, Myriam (John Adams Institute at Oxford); Dr DELERUE, Nicolas (John Adams Institute at Oxford); Dr TERUNUMA, Nobuhiro (KEK, Ibaraki, Japan); Dr KARATAEV, Pavel (John Adams Institute at RHUL, London); Mr SENANAYAKE, Rohan (John Adams Institute at Oxford); Dr WALCZAK, Roman (John Adams Institute at Oxford); Dr BOOGERT, Stewart (John Adams Institute at RHUL, London)

Presenter: Mr DEACON, Lawrence (John Adams Institute at RHUL, London, U.K.)

Session Classification: Parallel 2C: ILC Physics and Accelerator

Contribution ID: 83

Type: **not specified**

Positional and Angular Resolution of the CALICE pre-Prototype ECAL

Wednesday, 2 April 2008 12:25 (12 minutes)

In order to meet the physics goals of a future linear collider, a high level of hadronic jet energy resolution is required. This is best done by accurate track-shower matching, which has led to the proposal of high spatial granularity calorimetry. This talk will focus on a method of determining the positional and angular resolutions of the CALICE pre-prototype ECAL, in response to electrons. Data presented are taken from two recent test beam periods at DESY and CERN.

Talk, Poster, or Talk & Poster

Talk

Primary author: YILMAZ, Hakan (Imperial College)**Presenter:** YILMAZ, Hakan (Imperial College)**Session Classification:** Parallel 3C: Detector

Contribution ID: 84

Type: **not specified**

Study of $B \rightarrow K^* \ell \ell$ decays with BaBar

Monday, 31 March 2008 15:56 (12 minutes)

Measurements of the FCNC decay $B \rightarrow K \ell \ell$ allow for sensitive test of the Standard Model due to possible New Physics contributions in the interference between penguin and box diagrams. Results from Babar on the forward-backward asymmetry, K polarization, rate asymmetries and branching fraction are presented. The study of additional angular variables and the extension of the analysis to inclusive $B \rightarrow s \ell \ell$ decays are also discussed.

Talk, Poster, or Talk & Poster

Talk

Primary author: Ms WATSON, Jennifer (University of Edinburgh)**Presenter:** Ms WATSON, Jennifer (University of Edinburgh)**Session Classification:** Parallel 1B: Flavour Physics B-factory and Tevatron

Contribution ID: **87**Type: **not specified**

CMS upgrade studies

Monday, 31 March 2008 17:01 (12 minutes)

A luminosity upgrade to $10^{35} \text{ cm}^{-2} \text{ s}^{-1}$ for the LHC is expected after 2016. In order to maintain physics performance, the CMS experiment will also require upgrading; principally to the tracking and triggering systems, since detector occupancies and trigger rates are expected to be much higher. We report on ongoing studies into possible tracker designs and the feasibility of using tracking information in a Level 1 Trigger.

Talk, Poster, or Talk & Poster

talk

Primary author: Mr PESARI, Mark (Imperial College)**Presenter:** Mr PESARI, Mark (Imperial College)**Session Classification:** Parallel 1A: Collider Physics - QCD and Electroweak

Contribution ID: **88**Type: **not specified**

Study of direct CP violation in $B^\pm \rightarrow J/\psi K^\pm(\pi^\pm)$ decays

Monday, 31 March 2008 16:48 (12 minutes)

We present a search for direct CP violation in $B^\pm \rightarrow J/\psi K^\pm(\pi^\pm)$ decays.

The event sample is selected from 2.8 fb^{-1} of $p\bar{p}$ collisions collected by the D0 experiment in Run II of the Fermilab Tevatron Collider.

The charge asymmetry

$$A_{CP}(B^+ \rightarrow J/\psi K^+) = +0.0075 \pm 0.0061(\text{stat.}) \pm 0.0027(\text{syst.})$$

is obtained using a sample of approximately 40,000

$B^\pm \rightarrow J/\psi K^\pm$ decays.

The achieved precision is of the same level as the expected deviation predicted by some extensions of the standard model.

We also report the charge asymmetry

$$A_{CP}(B^+ \rightarrow J/\psi \pi^+) = -0.09 \pm 0.08(\text{stat.}) \pm 0.03(\text{syst.}).$$

Talk, Poster, or Talk & Poster

talk

Primary author: Mr HOLUBYEV, Kostyantyn (Lancaster University)

Presenter: Mr HOLUBYEV, Kostyantyn (Lancaster University)

Session Classification: Parallel 1B: Flavour Physics B-factory and Tevatron

Track Classification: Heavy Flavour Physics and CP Violation

Contribution ID: 89

Type: **not specified**

Small x gluon from exclusive J/psi production

Tuesday, 1 April 2008 12:18 (12 minutes)

Exclusive J/psi production, $\gamma p \rightarrow J/\psi p$, offers a unique opportunity to determine the gluon density of the proton in the small Bjorken x domain. We use the available HERA data to determine the gluon distribution in the region $10^{-4} < x < 10^{-2}$ for scales $2 < Q^2 < 10 \text{ GeV}^2$, where the uncertainty on the gluon extracted from the global parton analyses is large. We present results for gluons extracted using a LO analysis and for gluons extracted including NLO corrections and compare to the global analyses.

Talk, Poster, or Talk & Poster

talk

Primary author: Ms NOCKLES, Cathy (Liverpool University)**Presenter:** Ms NOCKLES, Cathy (Liverpool University)**Session Classification:** Parallel 2A: Collider Physics - Higgs

Contribution ID: **90**Type: **not specified**

Sherpa - an event generator for the LHC

Wednesday, 2 April 2008 12:31 (12 minutes)

We present recent developments in the Monte Carlo event generator Sherpa. An extension of the CKKW algorithm for merging Matrix Elements and Parton Showers to processes including decays of heavy unstable particles is discussed.

New shower algorithms based on the Catani-Seymour subtraction terms and dipole splitting functions are introduced.

A new Matrix Element generator for high multiplicity processes is presented together with two new phase space integration techniques. Applications to LHC physics are discussed.

Talk, Poster, or Talk & Poster

talk

Primary author: Mr HOECHE, Stefan (IPPP, Durham University)

Presenter: Mr HOECHE, Stefan (IPPP, Durham University)

Session Classification: Parallel 3A: Collider - BSM

Contribution ID: 95

Type: **not specified**

Progress on PP2020

Tuesday, 1 April 2008 16:00 (15 minutes)

Presenter: LANCASTER, Mark (UCL)

Session Classification: STFC Town Meeting Session 2

Contribution ID: 96

Type: **not specified**

PP Outreach Activities

Tuesday, 1 April 2008 16:15 (20 minutes)

Presenter: MATHIAS, Ray (LHC Outreach Officer)

Session Classification: STFC Town Meeting Session 2