

SEMINARS SEMINAIRES

Monday 9 to Friday 13 February

THEORY OF LHC PROCESSES
PRETTY-MUCH-FINAL AGENDA,
AS OF JANUARY 23 1998

Monday 9 February

14.00 to 18.00 hrs – Auditorium, bld. 500

- J. Huston: *Perspective from the Tevatron*
- Speaker to be announced: *Demands to theory from ATLAS/CMS (30')*
- T. Nakada: *LHC-B, goals and perspective (30')*

Tuesday 10 February

09.00 to 10.00 hrs – Auditorium bld. 500

- J. Stirling: *Structure functions*

10.30 to 12.00 hrs – TH Division Auditorium, bld. 4

- Special Topics Session: QCD
 - * M. Dittmar: *Towards a precise parton-luminosity determination at the LHC*
 - * Y. Dokshitzer: *QCD in dense matter*
 - * D. Kosower: *Prospects for the calculation of NNLO corrections*
 - * Z. Kunszt: *Four-fermion final states in NLO QCD*

14.00 to 17.30 hrs – Auditorium bld. 500

- W. Giele: *Jet physics*
- R.K. Ellis: *W & Z production*
- S. Catani: *QCD Resummations*

Wednesday 11 February

09.00 to 10.00 hrs – Auditorium, bld. 500

- M. Spira: *Production Properties of Higgs and SUSY particles*

10.30 to 12.30 hrs – TH Division Auditorium bld. 4

- Special Topics Session: HIGGS production
 - * A. Djouadi: *Tests on the MSSM Higgs sector at the LHC*
 - * H. Dreiner: *$H \rightarrow W^+W^- \rightarrow \ell^+ \ell^- \bar{\nu} \nu$ in the SM and MSSM as a Higgs discovery mode*
 - * V. Ilyin: *Associated Higgs+jet and Higgs+ ℓ production as a Higgs discovery mode*
 - * D. Zeppenfeld: *Intermediate mass Higgs search via weak boson fusion*

14.00 to 17.30 hrs – Auditorium, bld. 500

- H. Baer: *New developments and perspectives on the MSSM*
- G. Kane: *More General Approaches to Learning SUSY Physics from Data*
- S. Ambrosanio: *GMSB models: what should we expect at the LHC?*

Thursday 12 February

09.30 to 12.00 hrs – TH Division Auditorium, bld. 4

- Special Topics Session: Supersymmetry

Vous pouvez aussi consulter

For information on these seminars, please see

<http://wwwas.cern.ch/Bulletin/Seminars/current.html>

* F. Zwirner: *Signals of a super-light gravitino*

* J. Gunion: *Detection of delayed LSP decays at hadron colliders*

* T. Moroi: *Signatures of long-lived charged sleptons in GMSB*

* M. Krämer: *Neutralino pair production at NLO*

14.00 to 17.30 hrs – Auditorium, bld. 500

- Y. Nir: *B physics after the B-Factories*
- M. Mangano: *Heavy Flavour Production*
- S. Willenbrock: *Top physics*

Friday 13 February

09.30 hrs – TH Division Auditorium, bld. 4

- Special Topics Session: Beyond the Standard Model
 - * R. Casalbuoni: *Phenomenology of a decoupling model for the EW symmetry breaking*
 - * G. Jikia: *Anomalous vector boson couplings and χ PT*
 - * A. Ghinkulov: *Perturbative and non-perturbative heavy-Higgs signals at LHC*

14.00 to 17.30 hrs – Auditorium, bld. 500

- B. Webber: *Monte-Carlos for the LHC*
- T. Sjostrand: *Matching partonic X-sections with shower MCs*
- M. Seymour: *MCs and jet spectroscopy*

Unless otherwise specified, all talks in the Main Auditorium will be 50' long.

"Special Topics" talks will be 25' long.

A 30' coffee break will take place after the second talk of the afternoon plenary sessions. Discussion sessions on the topics of the day will possibly follow the afternoon sessions, in the Main Auditorium.

Monday 9 February

ISOLDE EXPERIMENTS COMMITTEE

Open session

at 14.00 hrs – Council Chamber, bld. 503

1. Introductory remarks by the Chairman.
2. Progress report by the ISOLDE Technical Group Leader.
3. ISOLDE Coordinator's report.
4. Beta-decay studies of dripline isotopes of Be (Caen - Göteborg - Aarhus - Madrid - Troitsk - Orsay - Mainz - CERN - Darmstadt); CERN/ISC 98-6/P99; G. Nyman.
5. Measurement of the ${}^7\text{Be}(p,\gamma){}^8\text{B}$ cross-section with an implanted ${}^7\text{Be}$ target: An addendum to ISOLDE proposal P91 and Beam-Time Request (Rehovot - Troitsk - Mainz - CERN - ISOLDE Collaboration); CERN/ISC 98-5/P91 Add.1; M. Hass.
6. Combined electrical, optical, and structural investigations of impurities and defects in wide-gap II-VI compounds (CERN - Berlin - Jena); CERN/ISC 98-4/P35 Add.2; M. Wienecke.
7. Structure and kinetics of vacancies and self-interstitials in ferromagnetic Fe: An Approach using ${}^{57}\text{Fe}$ Mössbauer spectroscopy (CERN - Aarhus - Troitsk - Berlin); ISC 98-3/P97; R. Sielemann.

Closed session

after the Open Session, 6th Floor Conference Room,
Main Building

Mardi 10 février

PRESENTATION TECHNIQUE

09.30-12.30 h – bât. 40/4-C01

Conception, fabrication, pose des portes métalliques spéciales

par M. WUESTENBERGHS / Vanderplanck
Metalworks

Une gamme des plus larges, portes blindées, acoustiques (jusqu'au niveau IIA), coupe feu anti-rayonnement (béta, gamma, neutrons) – permet de répondre à tous les besoins de protection et de fermeture métallique.

Vanderplanck Metalworks est spécialisée depuis plus de 80 ans dans la conception, la fabrication, la pose et le service après-vente de portes métalliques spéciales.

Seront aussi présentés les fournisseurs suivants:

- pour les portes sectionnelles : Emmg Overdoor
- pour les portes & aménagement vitres : Meyvaert Glass Eng.
- pour les portes à levée rapide : Dynaco
- produits Somati.

Langues : anglais, français

Informations : L. Abel / SPL-PS/ 79561

Tuesday 10 February

TECHNICAL PRESENTATION

at 10.00 hrs – IT Auditorium, bld. 31/3-004-5

SUN Microsystems UltraComputing Announcements

by R. WALPEN & J-L. BOCQUET / SUN Switzerland

New professional Workstations at PC prices:

Highlighting today's announcement is the unveiling of a comprehensive line of powerful new systems, including the Sun UltraTM 5 & 10 and Sun Ultra 60 families. The Ultra 60 workstation today becomes the fastest workstation in the industry at low price!

The new desktop systems target are technical users and others in computationally intense environments. They outperform the fastest 3D graphics and imaging systems from competition's top-performing 3D mechanical design machines.

The UltraComputing architecture boasts a number of technology firsts that allow users to meet the requirements for high-speed networking, collaborative computing and the use of complex multimedia data.

Sun also offers upgrade paths (from Sun systems and competition) for new ULTRA systems.

Organiser : S. Cannon / IT / 75036

Thursday 12 February

LHC PROJECT SEMINAR

at 14.15 hrs – LHC Auditorium, bld. 30/7th floor

LHC magnet tests: technology and objectives

by Peter SIEVERS & Louis WALCKIERS / CERN-LHC

New strategies, infrastructures and tools have to be designed for the measurement of the superconducting magnets needed for the LHC accelerator.

In particular, the high fields up to 9 Tesla and the very long but narrow twin apertures at 1.8 Kelvin along the bent cold mass of the 15 m long dipoles require the development of novel techniques. Moreover the series tests of the very large number of LHC magnets represent a substantial investment in hardware and manpower. First, an overview will be given of the test methods and tools. Thereafter, the sources of errors degrading the magnetic field quality and specific to superconducting magnets will be quantitatively compared to tolerances linked to the accelerator. Finally, examples will be given on how the measurements of magnetic perturbations occurring during quenches help to understand the performances of the superconducting magnets.

Thursday 12 February

SL SEMINAR

at 16.00 hrs – LHC Auditorium, bld. 30, 7th fl.*

Summary of the 8th workshop on LEP performance

by Steve MYERS / CERN

The 8th LEP Performance Workshop was held from January 27, till January 30 in Chamonix, France.

The workshop was sub-divided into 5 major sessions and a summing up session each lasting one half working day.

The subjects discussed in the major sessions were General Performance, Injection and Ramping, RF performance, Optics and Performance at High Energies.

A summary of the conclusions presented in the summing up session as well as important issues raised at each of the sessions are presented in this seminar.

* Please note unusual place !

Friday 13 February

IT TRAINING TUTORIAL

10.00-12.00 hrs – IT Auditorium, bld. 31/3-004

Basic Concepts in Object Oriented Programming

by Raul RAMOS POLLAN / CERN-IT

This tutorial presents a simple explanation of the fundamental ideas behind the so-called Object Oriented Paradigm. With a general approach, it will provide you with the basic understanding to be able to think OO and learn OO languages and techniques. Aspects like maintenance and reuse of code, quality, and large projects design and implementation will be discussed within the OO framework, and some of the reasons behind such benefits will be outlined.

The talk will be general enough not to require any previous knowledge of any programming language but some insight in software development would be convenient. In the same way, the talk will give you the basics to learn any OO based methodology or language.

This is a repetition of the presentation given on October 3rd.

Information: <http://wwwinfo.cern.ch/support/training>

Organisers: M.Marquina and R.Ramos /IT-User Support

Tuesday 17 February

COMPUTER COLLOQUIUM

at 14.00 hrs – Auditorium, building 500

Dublin Core Metadata and the Resource Description Framework: Foundations for Resource Discovery on the World Wide Web

by Stuart WEIBEL

pto...

The Internet can be thought of as a World Commons where many previously-distinct resource description communities are mixed together. The result thus far has been an undifferentiated information ecology lacking in effective discovery tools. Development of better tools depends in part on the evolution of conventions for the semantics, syntax, and structure of resource description.

The Dublin Core Initiative is an international and interdisciplinary effort to define a core set of semantics for discovery of electronic resources. Dr. Weibel will describe the evolution of Dublin Core semantics, the current state of the model, and efforts underway to standardize it. Issues of Internationalization and multilinguality will also be addressed.

Effective interchange of discovery information requires that there be an underlying architecture for metadata. The foundation for this architecture in the Web is now under construction under the auspices of the World Wide Web Consortium (W3C) under the name of the Resource Description Framework, or RDF. S. Weibel will discuss the co-evolution of the Dublin Core and the RDF and suggest how these related efforts will support a more robust information ecology than now exists on the Web.

About the speaker

Stuart Weibel has been a research scientist at the Online Computer Library Center since 1985. In recent years he has participated actively in Web standards development, including HTML, Uniform Resource Names, and metadata. He is a founding member of the International World Wide Web Conference Committee, Dr. Weibel manages the Dublin Core Workshop series, and has been instrumental in promoting the convergence of this broad resource description activity with the technical infrastructure developments underway under the auspices of the World Wide Web Consortium.

<http://www.oclc.org/~weibel/>

Mardi 17 février

IT TRAINING TUTORIAL

de 14.30 à 16.30 h – Amphithéâtre IT, bât. 31/3-004-5

Présentation d'ensemble du service central de courrier électronique

par Arnaud TADDEI / CERN-IT

Information: <http://wwwinfo.cern.ch/support/training>

Organisers: M.Marquina and R.Ramos /IT-User Support

Tuesday 17 February

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium, building 500

First results from the neutrino oscillation search with the upgraded KARMEN experiment.

by Klaus EITEL / Forschungszentrum Karlsruhe

The KARMEN neutrino experiment is situated at the beamstop of ISIS, which provides a neutrino beam of ν_e, ν_μ and $\bar{\nu}_\mu$ from the π^+/μ^+ decay chain at rest. The oscillation channels $\nu_\mu \rightarrow \nu_e$ and $\bar{\nu}_\mu \rightarrow \bar{\nu}_e$ (appearance) as well as $\nu_e \rightarrow X$ (disappearance) are investigated with a 56t liquid scintillation calorimeter at a mean distance of 18m from the ν source. An additional veto system was installed in 1996 within the massive iron shielding of the main detector to suppress cosmic induced background by a further factor of

about 40. This upgrade increased substantially the sensitivity of the oscillation search to reach $\sin^2 2\theta = 10^{-3}$ for large Δm^2 in the $\nu_\mu \rightarrow \nu_e$ channel after 2-3 years operation. Results of the first year with the upgraded experiment will be presented and compared with the 1990-95 data and also with the positive evidence for $\nu_\mu \rightarrow \nu_e$ oscillations from LSND.

* Tea & coffee will be served at 16.00 hrs.

POUR INFORMATION / FOR INFORMATION

ESONE Syscomms '98

Conference and exhibition

CERN, Main Building

25-26 March 1998

SysComms '98, organised by the ESONE committee in collaboration with VITA, PICMG, ESOFITA and GroupIPC, addresses aspects of embedded and real-time systems, including data acquisition, process control, software and hardware architectures, bus systems and communications.

SysComms '98 includes:

- Tutorial sessions, for an overview of embedded-system issues in two streams: "Copper" (for the more hardware oriented) and "Keyboard" (for the more software oriented audience). In addition to which there will be an application workshop on VMEbus for Physics applications,
- Research and implementation papers for the "state-of-the-art" in the field, presented by speakers from academia, industry, and research,
- An exhibition where more than forty vendors will show their hardware and software products.

Conference participation is free of charge for pre-registered personnel from CERN and ESONE member institutes.

For more information and electronic registration, consult the conference web site at:

<http://www.cern.ch/ESONE/Syscomms98/>
C. Parkman (for the local organising committee)

Vendredi 6 février

SEMINAIRE DE PHYSIQUE DES PARTICULES

à 14.00 h – Amphithéâtre du LAPP

Expériences de détection de matière noire

par Charling TAO / Collège de France

Cela fait déjà dix ans que notre communauté de physiciens des particules s'est lancée dans la détection de matière noire. Des collaborations ont été lancées avec des astrophysiciens, physiciens nucléaires, et physiciens du solide. Dix ans, c'est assez long pour dresser un bilan des premiers enthousiasmes et des premières déceptions. Quelques événements microlentilles ont été détectés, qui pourraient provenir de naines brunes dans le halo de notre galaxie, mais les quelques événements n'expliqueraient pas toute la matière noire attendue.

Les autres recherches ne sont pas positives. Quels sont les espoirs de découvertes envisagés aujourd'hui?