

SEMINARS SEMINAIRES

Monday 23 August

IT INFORMATICS TUTORIAL

14.00-16.00 hrs – IT Auditorium, bldg 31/3-004 *

The Java Series: Network and WWW Programming

by Raul RAMOS POLLAN / CERN-IT

This tutorial will introduce the fundamental mechanisms with which to incorporate TCP and UDP based communications in your Java programs, including interaction through HTTP so that your Java programs can communicate with existing Web servers. It will also introduce the basic ideas involved in programming applets, its limitations, considerations and functionalities.

The tutorial is aimed at anyone with basic working knowledge of Java. Familiarity with the Java stream classes would be convenient for the first part of the tutorial.

** Please note the change of date and location of this tutorial.*

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

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

Tuesday 24 August

DUALITY WORKSHOP

at 14.00 hrs – TH Conference Room, bldg 4

Scattering Amplitudes in D0-Brane Quantum Mechanics

by A. WALDRON / NIKHEF, Amsterdam

We describe in detail how one computes supergraviton scattering amplitudes in the effective quantum mechanical super Yang-Mills description of D0 brane dynamics (alias M(atr)ix Theory). Beginning with the construction of supergraviton states, thereafter an "LSZ" formalism allowing one to write S-matrix elements will be presented along with explicit results for eikonal scattering of 2 and 3 supergravitons. Attempts to probe M-theoretical higher curvature corrections seen at higher loop order in $d = 11$ SUGRA will also be discussed.

Tuesday 24 August

IT INFORMATICS TUTORIAL

14.00-16.00 hrs – IT Conference Room, bldg 600/R-017 *

The Java Series: Introduction to JDBC

by Raul RAMOS POLLAN / CERN-IT

This tutorial will explain how to make your programs access and interact with external or remote databases through the Java DataBase Connectivity (JDBC) interface. Through JDBC your Java programs are able to access a wide range of databases in an homogeneous way, making it very easy and straight forward to interact with any database to retrieve, modify and manipulate the data.

The tutorial requires some working knowledge of the Java language. Basic notions of databases and SQL would also be convenient although they will be briefly explained.

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

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

Vous pouvez aussi consulter

For information on these seminars, please see

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

Wednesday 25 August

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room, bldg 4

Instantons in SUSY Yang-Mills and string theory

by Michael GREEN / DAMTP, Cambridge University, UK

String theory has long suggested deep connections between Yang-Mills theory (open strings) and general relativity (closed strings). This talk will survey some of these connections with special emphasis on the manner in which instanton effects in superstring theory provide a remarkable amount of information concerning non-perturbative effects in supersym-metric Yang-Mills theory.

Thursday 26 August

THURSDAY SEMINAR

at 14.00 hrs – TH Conference Room , bldg 4

Magnetic Monopoles, Vortices, Confinement and Topology of Gauge-Fields

by H. REINHARDT / University of Tübingen

Yang-Mills Theory is considered in Abelian and center gauges on the lattice as well as in the continuum. Based on lattice results obtained in the so-called maximum center-gauge, the deconfinement phase transition is explained as a transition from a phase of percolated vortices to a phase of small vortices. The center vortex picture of the Yang-Mills-Vacuum as it emerges after maximum center-gauge fixing and center-projection is also developed in the continuum theory. Furthermore, it is shown that magnetic monopole currents flowing on the center vortex sheets are responsible for a non-trivial topology of the gauge-fields.

Friday 27 August

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room, bldg 4

CP violation in the Higgs sector of the MSSM

by A. PILAFTSIS / CERN-TH

Recently, it has been found that the tree-level CP invariance of the Higgs potential in the minimal supersymmetric standard model (MSSM) can be sizeably broken by loop effects of soft-CP-violating Yukawa interactions related to scalar top and bottom quarks. Within this framework, the one-loop CP-non-invariant renormalization-group improved effective potential is calculated, including leading logarithms due to two-loop Yukawa and QCD corrections. The CP-violating parameters of this scenario may be constrained by considering the new two-loop contributions to the electron and neutron electric dipole moments (EDM's). After implementing these new EDM constraints, the three neutral Higgs particles are predicted to strongly mix with one another and significantly modify their tree-level couplings to fermions and to the $W^\pm$ and Z bosons. The phenomenological consequences of such a minimal supersymmetric scenario of explicit CP violation on the production rates of the lightest Higgs particle and on its potential discovery at LEP2 and an upgraded Tevatron machine are discussed.

Tuesday 31 August

MONARC SEMINAR

10.00-11.00 hrs – IT Auditorium, bldg 31/3-004

Optical communication technologies – Roadmap towards high capacity transmission

by Prof. Kristian STUBKJAER / Technical University of Denmark

Prof. Stubkjaer is Director of the Research Centre COM (Communications, Optics, Materials) at TUD. His talk will review many of the technologies which constrain the bandwidth obtainable from wide-area network links, and discuss their likely evolution.

After the talk there will be more detailed discussions with members of the MONARC project who are trying to estimate the likely evolution of WAN costs between now and the start of LHC data analysis.

Organiser: David.O.Williams@cern.ch

Tuesday 31 August

IT INFORMATICS TUTORIAL

14.00-16.00 hrs – IT Auditorium, bldg 31/3-004

Library Computing Talk The Agenda Maker / Conference Manager

by Thomas BARON & Jean-Yves LE MEUR / CERN-AS

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

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

Wednesday 1 September

COMPUTING SEMINAR

at 16.00hrs – IT Auditorium, bldg 31/3-005

The Workbook Approach: Getting New Users Up to Speed in a HEP Offline Environment.

by Joseph PERL / SLAC

The Workbook approach is an efficient way to introduce members of a HEP collaboration to their collaboration's offline environment. It was first developed in SLD where offline experts were losing too much time on individual user assistance. The approach was extremely successful there and has since been replicated for BaBar.

Information is presented in the form of a workbook, a connected series of exercises. Imagine the world of offline software as a workshop full of tools.

The workbook has the user pick up each tool in turn, do something simple and useful with that tool, and then put that tool down and move on to the next.

References:

The Workbook for BaBar Offline Users:

<http://www.slac.stanford.edu/BFROOT/www/doc/workbook/workbook.html>

The Workbook for SLD Offline Users:

http://www-sld.slac.stanford.edu/sldwww/workbook/workbook_prod.html

Organiser: G.Folger / IT

Thursday 2 September

LARGE HADRON COLLIDER COMMITTEE

Open Session

at 09.00 hrs – Auditorium

09.00-10.05 ALICE Muon Arm TDR (LHCC 99-22/ALICE TDR 5; F. Staley, E. Vercellin, Y. Le Bornec)

Jeudi 2 septembre

ORACLE DEVELOPERS TECHNICAL SESSION

10.00-12.00 h – Amphithâtre IT, bât. 31/3-004

CAST Workbench - un outil de cartographie d'application

par Jean-David ALBOU / CAST

- Présentation de la société CAST et positionnement du produit
- Présentation des fonctionnalités principales de CAST Workbench sur une application
Compréhension de l'application par navigation entre les liens Objet-Objet (SP, fonction, tables, vues, triggers, séquences, synonymes, écrans clients, etc.)
Analyse d'impact sur toute l'application du changement d'un objet
Développement de code, debug, spécification, standards de développements, suivi d'avancée de projet
- Question Réponse techniques

Information: <http://wwwlh01.cern.ch/odf/techs/techs3.html>

Organisateur: Pedro Martel/EST-ISS

Thursday 2 September

LHC PROJECT SEMINAR

at 14.15 hrs – LHC Auditorium, Bldg. 30, 7th fl

FRESCA: Facility for the acceptance tests of the superconducting cables for LHC

by Arjan VERWEIJ / CERN-LHC

In the forthcoming five years about 6400 km of superconducting cable will be produced to be used in the main dipoles and quadrupoles for the LHC. Part of the acceptance of these cables is made at CERN. To do so, a unique test facility, called FRESCA, has been built. Superconducting cables can be tested at temperatures down to 1.8 K, currents up to 32 kA, and fields up to 10 T. The facility is based on the double-cryostat configuration, i.e. the background magnet and cable samples are housed in separate but combined cryostats. Besides these acceptance tests, various R&D topics on superconducting cables can be studied utilising FRESCA. First, an overview is given on the superconducting cable production for LHC and the requirements for the acceptance tests of these cables. The test facility is described, including the regulation, protection, data acquisition, cryogenics, and background magnet. The previously used 56 mm aperture 9 T dipole magnet as well as the recently installed 88 mm 10 T dipole are presented. Finally, recent results of measurements on several cables are shown.