



SEMINARS SEMINAIRES

Tuesday 18 August

PRESENTATION

at 14.00 hrs – DD Auditorium (Bldg 31, 3rd floor)

New line of VS 2000 colour workstations

by Richard STRAUB / Digital, Zürich

The next line of VAX colour work stations VS 2000 will be presented. Details will be given on configurations, performances, prices and availability; time will be allowed for questions and answers.

Wednesday 19 August

THEORETICAL SEMINAR

at 14.00 hrs – Theory Conference Room

Four-dimensional strings

by A.N. SCHELLEKENS / CERN

Large numbers of chiral four-dimensional string theories satisfying all the usual consistency conditions (conformal invariance, modular invariance and world-sheet supersymmetry) can be obtained by means of the 'covariant lattice' construction. This method provides a simple and elegant way of understanding many features of these theories, at the small price of bosonizing the Neveu-Schwarz-Ramond fermions and superghosts. An elementary explanation of this approach and its applications will be given.

Wednesday 19 August

EP SEMINAR

Please note unusual day !

at 16.30 hrs – Auditorium

Tensor meson production in radiative J/ψ decay

by Tim BOLTON / SLAC

The following topics will be discussed:

1. A comparison of J/ψ to $\gamma f(1270)$ and $\gamma f'(1525)$, using observations in KK and $\pi\pi$ from the full Mark III data set, with expectations from the quark model.
2. A review of the $\theta(1720)$, using updated numbers from the full Mark III data set.

3. A consistent description of the $\xi(2230)$ region using the $\gamma\pi\pi$ and γKK channels.

4. Results on the decay J/ψ to $\gamma\eta\eta$ from Mark III.

5. Results on J/ψ to $\gamma\eta\eta'$ from Mark III.

Friday 21 August

DD SEMINAR

at 11.00 hrs – DD Auditorium (Bldg 31, 3rd floor)

Vectorization of the EGS4 Monte Carlo Code

by Kenichi MIURA / Mainframe Division,
Fujitsu Ltd., Kawasaki, Japan

The EGS4 code system, developed at SLAC by W.R. Nelson et al., stimulates the electron-gamma cascade shower by the Monte-Carlo method. Since a great many particles are generated in a cascade shower, the inherent degree of parallelism is potentially very high. However, the coding style of the original EGS4 code is very much scalar oriented : only one particle is processed at each step of simulation, keeping all the new algorithms and the new coding methodology which will allow the maximal exposure of parallelism for the vector processing. I will describe my approach for vectorizing the EGS4 code on the Amdahl 1200 vector processing system. In the vectorized version of the EGS4, named EGS4-V, the vectors are formed with particles with the identical characteristics which are gathered from a pool of pending particles by using the vector data handling functions in the vector processor system. Thus, particles are processed in batch rather than individually. I have introduced a new control scheme based on the data flow concept, as well as a new data structure. So far I have obtained an asymptotic speed-up factor of 10 over the original EGS4 code to the 1200 system for a sample problem (1 GeV electrons into a Pb block of infinite size). Investigation of the vectorization method for the geometry routines is underway. I will also briefly describe my recent effort in parallelizing the EGS4 code on the Sequent Balance 21000 parallel processor system, and compare the differences in the two approaches in concept, coding effort and performance.

Tuesday 25 August**CERN PARTICLE PHYSICS SEMINAR**

at 16.30 hrs – Auditorium

From bottom to topby Haim HARARI / Weizmann Institute,
Rehovot**Wednesday 26 August****CAS ACCELERATOR SEMINAR**

at 14.00 hrs – Auditorium

Report on SLC commissioning

by P. BAMBADE / SLAC

**TRAINING AND
EDUCATION
*ENSEIGNEMENT***

SUMMER STUDENT LECTURE PROGRAMME

Date	Time	Lecturer	Title
This week			
Mon. 17 August	10.30	H. Nicolai	Introduction to strings and superstrings (1)
Tue. 18 August	10.30	H. Nicolai	Introduction to strings and superstrings (2)
Wed. 19 August	09.00		Course review

All lectures will be held in the Main Auditorium and will be given in English (although questions in French are welcome).

Fellows and Associates Service
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