

Friday 21 July*

PS SEMINAR

at 11.00 hrs – PS Auditorium

RHIC Machines and its Ion Sources

by K. PRELEC / Brookhaven National Laboratory

The RHIC project will be described including its most important parameters and the status of construction of its various components. The time schedule will be discussed, as well as the upcoming test of the transfer line from AGS to RHIC. The proposed mode of gold ion acceleration (tandem-Booster-AGS) will be presented, concluding with the heavy ion source option and emphasizing the EBIS project.

* Please note unusual date

Friday 21 July

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

An update on the light quark masses

by Daniel WYLER / Zurich University

Monday 24 July*

COMPUTING COLLOQUIUM

at 16.00 hrs – Auditorium

Performance Trends in High-End Processors

by George A. SAI-HALASZ / IBM, T. J. Watson Research Center, Yorktown Heights, N.Y. 10598

Performance trends and limits are projected for general purpose high-end processors. The key in identifying trends is the understanding of the pivotal factors at any given stage of technology progression. One such parameter is the physical area of the processor. In coming technologies there will be opposite demands placed on the system's area stemming from a need to reduce the proportion of interconnection capacitance and to send signals across the processor. Contrary to the usual perception, delays resulting from wiring capacitance decrease if processor area increases, while the minimization of signal

travel times favors reducing area. The system size trade-off in the case of bipolar processors is primarily determined by power density, while CMOS processor sizes are determined by wirability requirements. To achieve the full potential of CMOS, interconnections will have to be carefully planned. The performance limits of bipolar and room temperature CMOS uni-processors are shown to be very similar. The highest performance technology on the horizon is liquid nitrogen temperature CMOS. Technologies based on III-V compound devices, or exotic quantum structures, are not likely to play a role in future general-purpose high-end systems.

* Please note the unusual day

Wednesday 26 July

PS SEMINAR

at 11.00 hrs – PS Auditorium

Commissioning and Early Operational Results from CEBAF

by Charles SINCLAIR / CEBAF, Newport News, U.S.A.

Wednesday 26 July

SEMINAR

at 16.00 hrs – Council Chamber

Why should the public understand Science?

by John DURANT / Professor of the Public Understanding of Science, Imperial College & Assistant Director of the Science Museum, London

Wednesday 26 July*

SPECIAL COLLOQUIUM

at 16.30 hrs – Auditorium**

Present and Future Programme of KEK

by H. SUGAWARA / Director General KEK (Japan)

* Please note unusual day.

** Tea & coffee will be served at 16.00 hrs.

EDUCATION SERVICES EDUCATIFS

SUMMER STUDENT LECTURES

<u>Date</u>	<u>Time</u>	<u>Lecturer</u>	<u>Title</u>
<u>Week 29</u>			
Mon. 17 July	09.00	L. Foa	Collider Physics (3/6)
	10.05	L. Foa	Collider Physics (4/6)
	11.10	A. de Rujula	Introduction to the Fundamental Concepts of Particle Physics (3/6)
	14.00	E. Lillestøl	Basic Concepts in Particle Physics (1/4)*
	15.00	E. Lillestøl	Basic Concepts in Particle Physics (2/4)*

<i>Tue. 18 July</i>	09.00	L. Foa	Collider Physics (5/6)
	10.05	L. Foa	Collider Physics (6/6)
	11.10	A. de Rujula	Introduction to the Fundamenta Concepts of Particle Physics (4/6)
	14.00	E. Lilestøl	Basic Concepts in Particle Physics (3/4)*
	15.00	E. Lilestøl	Basic Concepts in Particle Physics (4/4)*
<i>Wed. 19 July</i>	09.00	S. Jarp	Computing at CERN (3/3)
	10.05	H.J. Hilke	Particle Detectors (1/6)
	11.10	H.J. Hilke	Particle Detectors (2/6)
<i>Thu. 20 July</i>	09.00	A. de Rujula	Introduction to the Fundamenta Concepts of Particle Physics (5/6)
	10.05	H.J. Hilke	Particle Detectors (3/6)
	11.10	H.J. Hilke	Particle Detectors (4/6)
<i>Fri. 21 July</i>	09.00	H.J. Hilke	Particle Detectors (5/6)
	10.05	H.J. Hilke	Particle Detectors (6/6)
	11.10	A. de Rujula	Introduction to the Fundamenta Concepts of Particle Physics (6/6)

* For non-physics students

Week 30

<i>Mon. 24 July</i>	09.00	R. Kleiss	The Standard Model (1/6)
	10.05	R. Kleiss	The Standard Model (2/6)
	11.10	J. Jowett	Particle Accelerators (1/5)
<i>Tue. 25 July</i>	09.00	R. Kleiss	The Standard Model (3/6)
	10.05	R. Kleiss	The Standard Model (4/6)
	11.10	J. Jowett	Particle Accelerators (2/5)
<i>Wed. 26 July</i>	09.00	R. Kleiss	The Standard Model (5/6)
	10.05	R. Kleiss	The Standard Model (6/6)
	11.10	M.W. Krasny	Deep Inelastic Lepton Scattering (1/2)
<i>Thu. 27 July</i>	09.00	J. Schukraft	Heavy Ion Physics at CERN: from SPS to LHC (1/2)
	10.05	E. Auge	CP Violation (1/2)
	11.10	M.W. Krasny	Deep Inelastic Lepton Scattering (2/2)
<i>Fri. 28 July</i>	09.00	J. Jowett	Particle Accelerators (3/5)
	10.05	J. Schukraft	Heavy Ion Physics at CERN: from SPS to LHC (2/2)
	11.10	E. Auge	CP Violation (2/2)

These lectures are prepared for Summer Students but of course they are open to anyone at CERN. Many of these lectures treat topics at general level, so that they are a good opportunity for a staff member to find out more about something outside their daily work.

All lectures are given in English and held in the Auditorium. The complete programme (Word file) is available on the PE Division server :

- for PC users on the Novell network : attach to SRV1_PE USR as Guest
- for Mac users :

Appletalk zone PE Division
server SRV1_PE
username Guest
Chooser volume USR (folder Home>Guest>Summer)

Personnel Division
Tel. 4471