

Front End Electronics 2006

Meeting schedule May 17 - 20 , 2006

Wednesday 17th

		CMOS Technology
9:00	Ambrosi/Battiston	Welcome and Introduction
9:15	Rick Mauritzson	45 Introduction to Micron's Image Sensor program, technical accomplishments and future evolution
10:00		discussion
		New facilities
10:30	Marcus French	30 Front End Electronics for European X-ray free electron laser (XFEL) facility
11:00		break
11:30	Holger Flemming	30 Requirements and activities on Front End electronics developments for the FAIR
12:00	Ian Lazarus	30 Front end electronics and system design for the NUSTAR experiments at the FAIR facility
12:30		lunch
		LHC and SLHC
14:30	Philippe Farthouat	30 Upgrade of LHC detectors: summary for ATLAS
15:00	Paulo Moreira	20 GBT, an integrated solution for data transmission and TTC distribution in the SLHC
15:20	Hans Kaestli	20 CMS pixel detector front end: performance and prospects towards SLHC
15:40	Alexander Kluge	30 The ALICE silicon pixel detector
16:10		break
		Medical applications
16:40	Gianni Mazza	20 64 channel ASIC for the readout of gas detectors for hadron therapy
17:00	Alan Rudge	20 Performance of a 128Channel counting mode ASIC for direct X-ray imaging
17:20	Hans Krueger	20 Simultaneous photon counting and charge integrating readout electronics for X-ray

Thursday 18th

		Radiation effects
9:00	Federico Faccio	30 Radiation tolerance of commercial 130nm CMOS technologies for High Energy Physics experiments
9:30	Jim Hoff	20 Single Event Upset Tolerance in 0.13µm CMOS

9:50 Hirokazu Ikeda	20	Front End circuit with deep submicron FD-SOI
10:10 Ned Spencer	20	Silicon Germanium BICMOS: Irradiation Resistance and Low Power Analog Applications
Special design and new detectors		
10:30 Lawrence Jones	30	ADC designs for front end electronics at RAL
11:00		break
11:30 Paul O'Connor	30	Noise and Power Tradeoffs in CMOS Front Ends
12:00 Angelo Rivetti	30	A Fast Large Dynamic Range Shaping Amplifier for Particle Detector Front-End
12:30 Ludovico Ratti	20	CMOS processes in the 100-nm minimum feature size range for applications to the next generation collider experiments
12:50 Giovanni Anelli	30	A high performance beam hodoscope for the P326 experiment at CERN
13:20 Carlo Fiorini	20	A CMOS circuit for silicon drift detectors readout in exotic atoms research
13:40		lunch
Excursion		Excursion

Friday 19th

MAPS		
9:00 Mark Winter	30	Overview of MAPS for Future HEP experiments
9:30 Wojciech Dulinski	30	Monolithic Pixel Sensors for Particle Tracking: the status after seven years of development
10:00 Renato Turchetta	30	MAPS for non-HEP applications
10:30 Marlon Barbero	20	BELLE microvertex upgrade based on MAPS: lessons learned from CAP3 and plans for CAP4
10:50		break
11:20 Grzegorz Deptuch	20	Design and test results of monolithic pixel sensor for a novel technique of hadrontherapy
11:40 Andrei Dorokhov	20	NMOS-based high gain amplifier for MAPS
12:00 Valerio Re	20	Monolithic active pixel sensors in a 130 nm triple well CMOS process
12:20 Alessandro Marras	20	MAPS with advanced on-pixel processing
12:40 Pavel Rehak	20	Time-sensitive CMOS MAPS
13:00		lunch
Neutrino experiments		
14:40 Tom Zimmerman	20	An APD Readout Chip for the NOvA experiment

15:00	John Oliver	20	Front end electronics for the NOvA neutrino detector
15:20	Paul Rubinov	20	Development of Front End Electronics for Minerva
15:40	Steven Bunch	20	Patara chip: A prototype readout chip for solid-state neutron detectors at the Spallation Neutron Source
16:00			break
			Space applications
16:30	Sven Herrmann	20	Design and performance of the CAMEX readout ASIC of the X-ray pnCCD for the eROSITA mission
16:50	Matteo Porro	20	Multichannel Time Variant readout electronics of DePMOS based APS for the XEUS Wide Field Imager
20:00	Social dinner		Social dinner

Saturday 20th

			3D electronics
9:00	Aramin Klumpp	30	3D system integration
9:30	Ray Yarema	30	3D Integrated Circuits for HEP
			International Linear Collider
10:00	Cristophe De la Taille	30	Front-end electronics for calorimetry at ILC
10:30	Marcel Trimpl	30	Status of DEPFET pixels for the ILC and associated readout electronics
11:00			break
11:30	Xavier Llopart	20	Timepix, a pixel readout chip for Time-of-Flight and energy measurements
12:00	Jean-Francois Genat	20	Front end and readout electronics for silicon strips tracker
12:30			Closing remarks