

8th "Trento" Workshop on Advanced Silicon Radiation Detectors (3D and p-type)

Monday 18 February 2013 - Wednesday 20 February 2013

FBK, Trento

Programme

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Monday 18 February 2013

Registration - Lobby (08:45-09:30)

Introduction - "Stringa" Conference Hall (09:30-11:00)

- **Conveners: Boscardin, Maurizio (FBK)**

time	title	presenter
09:30	Welcome	GENTILI, Massimo (FBK)
09:45	TIFPA	BATTISTON, Roberto (University of Trento and INFN)
10:00	Upgrade Planning for the ATLAS Tracker	ALLPORT, Philip Patrick (University of Liverpool (GB))
10:30	Diamond Sensors for HE Frontier Experiments	KAGAN, Harris (Ohio State University (US))

Coffee Break - Lobby (11:00-11:20)

Running and upcoming experiments - "Stringa" Conference Hall (11:20-13:20)

- **Conveners: Kramberger, Gregor (Jozef Stefan Institute (SI))**

time	title	presenter
11:20	Performance and radiation hardness of the LHCb Velo	SZUMLAK, Tomasz (AGH University of Science and Technology (PL))
11:50	Overview of the ATLAS Insertable B-Layer (IBL) Project.	LA ROSA, Alessandro (Universite de Geneve (CH))
12:20	3D modules production for the IBL detector	GAUDIELLO, Andrea (INFN and University of Genova)
12:40	Characterization of 3D CNM prototypes for the ATLAS forward detector	GRINSTEIN, Sebastian (IFAE/ICREA - Barcelona)

Conference Photograph - (13:20-13:30)

Lunch Break - Canteen (13:30-15:00)

Planar Sensors 1 - "Stringa" Conference Hall (15:00-16:20)

- **Conveners: Unno, Yoshinobu (High Energy Accelerator Research Organization (JP))**

time	title	presenter
15:00	Recent Achievements of the ATLAS Upgrade Planar Pixel Sensors R Project	WEINGARTEN, Jens (Georg-August-Universitaet Goettingen (DE))
15:20	Characterization of thin n-in-p planar pixel sensors with active edges before and after irradiation	TERZO, Stefano (Max-Planck-Institut fuer Physik (Werner-Heisenberg-Institut) (D))
15:40	Update on CCE results with very thin (50µm) Si detectors	CASSE, Gianluigi (University of Liverpool (GB))
16:00	PTP and the inter-strip capacitance and resistance for irradiated ATLAS07 mini-sensors.	BOHM, Jan (Institute of Physics ASCR Prague)

Coffee Break - Lobby (16:20-16:40)**Planar Sensors 2 - "Stringa" Conference Hall (16:40-18:30)****- Conveners: Casse, Gianluigi (University of Liverpool (GB))**

time	title	presenter
16:40	Study of Behaviour of n-in-p Silicon Sensor Structures Before and After Irradiation	UNNO, Yoshinobu (High Energy Accelerator Research Organization (JP))
17:00	Fabrication of new p-type pixel detectors with enhanced multiplication effect in the n-type electrodes.	BASELGA BACARDIT, Marta (Universidad de Valencia (ES))
17:20	Charge collection studies on special diodes from RD50 multiplication run	KRAMBERGER, Gregor (Jozef Stefan Institute (SI))
17:40	Ultra-Fast Silicon Sensors	SADROZINSKI, Hartmut (SCIPP, UC santa Cruz)
18:00	Discussion	

Welcome Cocktail - (19:30-20:30)

Tuesday 19 February 2013

3D Sensors 1: Fabrication and characterization - "Stringa" Conference Hall (09:00-11:00)

- **Conveners: La Rosa, Alessandro (University of Geneva)**

time	title	presenter
09:00	Production of 3D silicon pixel sensors at FBK for the ATLAS IBL	BOSCARDIN, Maurizio (FBK)
09:20	Characterization results of recent CNM 3D productions	MICELLI, Andrea (IFAE Barcelona)
09:40	Investigation of the electrical characteristics of double-sided silicon 3D sensors after irradiation with different particles	MENDICINO, Roberto (University of Trento, INFN Padova (gruppo collegato di Trento))
10:00	Charge Collection Measurements of Irradiated 3D Sensors	HOEFERKAMP, Martin (University of New Mexico (US))
10:20	Characterization of 3D-DDTC strip sensors with passing-through columns	BETANCOURT, Christopher (Albert-Ludwigs-Universitaet Freiburg (DE))
10:40	Testbeam and laboratory characterization of 3D CMS pixel sensors	SOLANO, Ada (Universita di Torino e INFN (IT))

Coffee Break - Lobby (11:00-11:20)

3D Sensors 2: New developments - "Stringa" Conference Hall (11:20-13:30)

- **Conveners: Da Via, Cinzia (University of Manchester)**

time	title	presenter
11:20	3D Diamond Detectors	HAUGHTON, Iain (The University of Manchester)
11:40	Latest developments for the improvement of double-sided 3D detectors fabrication at FBK	ZORZI, Nicola (FBK)
12:00	Numerical simulation of thin 3D detectors with built-in charge multiplication	POVOLI, Marco (University of Trento)
12:20	3D Double-Sided sensors for the CMS phase-2 vertex detector	PELLEGRINI, Giulio (IMB-CNM-CSIC)
12:40	Modelling of 3D detectors and comparison with data	WATTS, Stephen
13:00	Discussion	

Lunch Break - Canteen (13:30-15:00)

CMOS Sensors and Electronics - "Stringa" Conference Hall (15:00-16:20)

- **Conveners: Darbo, Nanni (Universita e INFN (IT))**

time	title	presenter
15:00	First experience with radiation-hard active sensors in 180 nm HV CMOS technology	FEIGL, Simon
15:20	A thin and fully depleted monolithic pixel sensor in SOI technology	MATTIAZZO, Serena (Universita e INFN (IT))
15:40	Optimization of timing performance of large-area FBK SiPMs in the scintillation light readout	GOLA, Alberto (Fondazione Bruno Kessler)

16:00	Integrated Circuit Design for Time-of-Flight PET with Silicon Photomultiplier	ROLO, Manuel Dionisio (LIP and INFN Torino)
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Coffee Break - Lobby (16:20-16:40)

Non HEP Projects - "Stringa" Conference Hall (16:40-18:10)

- Conveners: Piemonte, Claudio (FBK)

time	title	presenter
16:40	HYDE Project: the combination of 3D detectors with polysiloxane based scintillators.	QUARANTA, Alberto (Department of Industrial Engineering)
17:00	X-ray detectors development at the Swiss Light Source	BERGAMASCHI, Anna (PSI)
17:20	Wide Area Radiation Surveillance with Semiconductor Detectors	PARZEFALL, Ulrich (Albert-Ludwigs-Universitaet Freiburg (DE))
17:40	Discussion	

Conference Dinner - (19:30-22:30)

Wednesday 20 February 2013

Microfabrication - "Stringa" Conference Hall (09:20-11:00)

- **Conveners: Sadrozinski, Hartmut (SCIPP)**

time	title	presenter
09:20	Studies on enhanced silicon detector cooling and integration through microfabrication techniques at CERN	PETAGNA, Paolo (CERN) ROMAGNOLI, Giulia (Universita e INFN (IT))
09:40	Silicon Buried Channels for Pixel Detector Cooling	RONCHIN, Sabina (FBK)
10:00	Microfluidic scintillation detectors for hadron therapy and high energy physics	MAODDI, Pietro (CERN)
10:20	3D-S: A fast, high resolution, low-mass, detector with embedded cooling and internal charge multiplication capability	DA VIA, Cinzia (University of Manchester (GB))
10:40	A new 3D PIN diode structure for neutron detection	RONCHIN, Sabina (FBK)

Coffee Break - Lobby (11:00-11:20)

Active/Slim Edges - "Stringa" Conference Hall (11:20-13:00)

- **Conveners: Dalla Betta, Gian-Franco (University of Trento and INFN)**

time	title	presenter
11:20	Thin Edgeless Silicon Pixel Sensors on Epitaxial Wafers	RASHEVSKAYA, I. (INFN Trieste)
11:40	Novel edgeless n-on-p planar pixel sensors for the ATLAS tracker upgrade	GIACOMINI, Gabriele (Fondazione Bruno Kessler)
12:00	Progress on slim edges with Scribe-Cleave-Passivate	SADROZINSKI, Hartmut (SCIPP, UC santa Cruz)
12:20	Discussion	
12:50	Conference Closing	

Lunch Break - Canteen (13:00-14:30)