

PIXEL2002 Draft Agenda

Version of May 5, 2002

Sunday September 8, 2002

16:00 – 21:00 Registration and reception

Monday September 9, 2002

8:00 – 9:00 Registration

Overview of Pixel Tracking Detectors in Particle Physics

9:00 – 9:30 ATLAS – M. Garcia-Sciveres(LBNL)

9:30 – 10:00 BTeV - J. Appel(FNAL)

10:00 – 10:30 CMS – R. Horisberger(PSI)

10:30 – 11:00 Coffee

Overview of Monolithic CMOS Pixel Detectors

11:30 – 12:00 Title TBD – E. Fossum(Micron Technology Inc.)

11:30 – 12:00 Monolithic CMOS Pixel Detectors in Particle and Nuclear Physics
(tentative title)- G. Deptuch(LEPSI)

12:00 – 1400 Lunch

Overview of Pixel Detectors for Heavy Ion Physics

14:00 – 14:30 ALICE – P. Riedler(CERN)

Electronics

14:30 – 14:50 Design and Realization of a Rad-Hard 0.25 Micron Chip for High Energy
Physics Data Acquisition System – A. Gabrielli(Univ. of Bologna)

14:50 – 15:10 The Read-Out System of the ALICE Pixel Detector – A. Kluge(CERN)

15:10 – 15:30 Front-end Pixel Chips for Tracking in ALICE and Particle Identification in
LHCb – K. Wyllie(CERN)

15:30 – 15:50 Front-end Pixel Chips for the BTeV Experiment(tentative title) – D.
Christian(FNAL)

16:00 – 16:30 Coffee

16:30 – 16:50 The DMILL Readout Chip for the CMS Pixel Detector – W. Erdmann (ETH Zurich)

16:50 – 17:10 The Token Bit Manager for the CMS Pixel Readout – E. Bartz(Rutgers Univ.)

Tuesday September 10, 2002

Electronics

9:00 – 9:20 Multi-element Si sensor with Readout ASICs for EXAFS Spectroscopy at NSLS – G. De Geronimo(BNL)

9:20 – 9:40 Pixel Readout Electronics Development for a Hybrid Silicon Pixel Array Gamma Camera with On-chip Energy Discrimination System V. Cencelli(INFN)

9:40 – 10:00 The Front-end ASIC for the ATLAS Pixel Detector – speaker TBD

10:00 – 10:20 The Readout Architecture of the ATLAS Pixel System – R. Beccherle (INFN Genova)

10:30 – 11:00 Coffee

11:00 – 11:20 Test Beam Results on ATLAS Pixel Electronics – speaker TB

Sensors

11:20 – 11:50 Sensor Development for Pixel Detectors(tentative title) – T. Rohe(PSI)

12:00 – 1400 Lunch

14:00 – 14:30 Ultra-rad-hard Sensors for Particle Physics Applications - (topic proposed)

14:30 – 14:50 Active Pixel Sensor Architectures in Standard CMOS Technology for Charged-Particle Detection – D. Passeri(Univ. of Perugia)

14:50 – 15:10 Development of an Active Pixel Sensor Vertex Detector – H. Matis (LBNL)

15:10 – 15:30 CVD Diamond Pixel Detector Development – R. Stone(Rutgers Univ.)

15:30 – 15:50 Test Beam Results of ATLAS Pixel Sensors – A. Andreaza(Univ. of Milano)

16:00 – 16:30 Coffee

Integration

16:30 – 17:00 Future Directions in Mechanical/Cooling Systems of Pixel Trackers for Particle Physics – W. Miller(Innovative Technologies International)

17:00 – 17:20 BTeV Silicon Detector Integration Issues – M. Wong(FNAL)

17:20 – 17:40 Towards A Pixel Detector Control System for the ATLAS Pixel Detector - S. Kersten(Univ. of Wuppertal)

Wednesday September 11, 2002

Hybridization

9:00 – 9:30 Future Directions in Hybridization of Pixel Detectors(tentative title) – O. Ehrmann(IZM)

9:30 – 9:50 Pixel Detector Module for the BTeV Experiment at Fermilab – S. Zimmerman(FNAL)

9:50 – 10:20 (title TBD) – A. Huffman(MCNC)

10:30 – 11:00 Coffee Break

11:00 – 11:20 Studies on ATLAS Pixel Modules – F. Hugging(Univ. of Bonn)

11:20 – 11:40 A Low Mass, Low Profile Interconnect for the ATLAS Pixel Detector Modules – R. Boyd(Univ. of Oklahoma)

11:40 – 12:00 Reworking of Indium Bump Bonded Pixel Detectors – G. Alimonti(INFN Milano)

12:00 – 12:20 Studies on MCM-D Connection Structures – P. Gerlach(Univ. of Wuppertal)

12:30 Lunch

Free afternoon

Thursday September 12, 2002

Medical/biological applications

9:00 – 9:30 Medical Applications of Pixel Detectors – B. Barber(Univ. of Arizona) (proposed)

- 9:30 – 9:50 X-Ray Detector for Crystallography and Small Animal Imaging –
P. Delpierre(Centre de Physique des Particules de Marseille)
- 9:50 – 10:10 Protein Crystallography Instrumentation(proposed) – speaker TBD
- 10:10 – 10:30 Pixel Detectors for X-Ray Crystallography(proposed) – speaker TBD
- 10:30 – 11:00 Coffee
- 11:00 – 12:00 Contributed talks
- 12:00 – 1400 Lunch

Astrophysics applications and photon detection

- 14:00 – 14:30 Application of CdTe/CdZnTe Pixels to X-ray and Gamma-ray
Astrophysics – T. Takahasi (ISAS)
- 14:30 – 15:00 X-ray Polarimetry with a Micropattern Gas Detector with Pixel Read-Out
(proposed) – R. Bellazini(INFN, Pisa)
- 15:00 – 15:20 Localized Feedback in Silicon Avalanche Photodiodes – A. Khodin
(Inst. of Electronics, National Academy of Sciences, Belarus)
- 15:20 – 15:40 X-ray Scatter-to-Primary Ratio versus Thickness, Two Analytic Models
Evaluated Against Monte Carlo Calculations – J. Tkaczyk(General
Electric Research)
- 15:40 – 16:00 Pixel Hybrid Photon Detectors (HPDs) for the LHCb RICH system –
K. Wyllie(CERN)(tentative)
- 16:00 – 16:30 Coffee
- 16:30 – 18:00 Contributed talks
- 18:00 – 18:15 Closeout