



Third International Conference on
« **New developments in photodetection** »
Beaune, France, 17-21 Juin 2002

Oral Presentations

Session A : Trends, Needs and Dreams

Chairman: JP. Peigneux

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|-----|------------|--|
| A-1 | J.L. Faure | In Beaune: Introductory talk |
| A-2 | K. Arisaka | In Astrophysics: Overview |
| A-3 | J. Chabbal | In Medical: 2D X-Ray Detectors for Medical Imaging |

Session B: PMT, HPD, Vacuum Detector

Chairman: K. Arisaka

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| B-1 | M. Teshima | Overview |
| B-2 | P. Hink | Characterization of a Position Sensitive, Flat Microchannel Plate Photomultiplier Tube |
| B-4 | A. Tripathi | A Systematic Study of Large PMTs for Pierre Auger Observatory |

Session B (cont): PMT, HPD, Vacuum Detector

Chairman: J.C. Vanel

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| B-5 | O. Siegmund | Quantum efficiency and stability of alkali halide and diamond UV photocathodes in the presence of electric field |
| B-6 | O. Deschamps | Study of Multianode Photomultipliers for the electromagnetic calorimeter preshower read out of the \LHCb\ experiment |
| B-7 | K. Passmore | Development and Characterization of High Quantum Efficiency, Low Dark Current III-V Photocathode Dual MCP PMTs |
| B-8 | C.H. Park | Experimental Study on New Hybrid Approach to Electron Multiplication |
| B-9 | C. Joram | Development of a 10" HPD with integrated readout electronics |

Session C1: Solid States (visible, γ , X)

Chairman: H. Fanet

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| C1-1 | O. Limousin | Overview |
| C1-3 | F. Lebrun | The Compton Cube |

Session C2 APD

Chairman: B. Ille

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| C2-1 | K. Deiters | Radiation hard Avalanche Photo Diodes for the CMS ECAL |
| C2-2 | K. Shah | Position Sensitive Avalanche Photodiodes |
| C2-3 | B. Dolgoshein | Silicon Photomultiplier and its applications |

Session C2 (cont): APD

Chairman: H. El Mamouni

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| C2-4 | V. Solovov | Low Temperature Performance of a Large Area Avalanche Photodiode in the Visible and VUV Range |
| C2-5 | Y. Musienko | Study of the Hamamatsu avalanche photodiodes at liquid nitrogen temperatures |
| C2-6 | A. H. Heering | Properties of the CMS HCAL Hybrid Photodiode |

Session D: Rich+Gaseous

Chairman: A.Breskin

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| D-1 | E. Nappi | Trends in the development of large area photodetectors for Cherenkov light imaging applications |
| D-2 | M. Fraga | The GEM scintillation in He-CF ₄ , Ar-CF ₄ , Ar-TEA and Xe-TEA mixtures |
| D-3 | D. Moermann | Recent developments in gaseous photomultipliers for the UV-to-visible range |

Session E Applications in Physics

Chairman: Ph. Goret

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| E-1 | A. Petrolini | The photo-detector for the EUSO experiment |
| E-2 | G. Moret | Auto-triggerable HPD sensors fully readout on ethernet : applications for high energy physics and medical imaging |
| E-3 | D. Paneque | Enhance of the detection efficiency of a Cherenkov telescope |
| E-4 | D. Ferenc | Novel Camera Concept for Space Applications (like in EUSO Experiment) |

Session E (cont) Applications in Physics

Chairman: J-L. Faure

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| E-6 | H. Halloin | Performance of CLAIRE, the first balloon-borne gamma-ray lens telescope |
| E-7 | R. Ahuja | Picosecond-Gated, Ultra-High Repetition Rate, Intensified CCD Camera System |
| E-8 | G. Boudoul | The AMS-RICH prototype |

Session F PET & Medical

Chairman: P. Le Du

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| F-1 | J.N. Talbot | Positron Emission Tomography with [18F]-FDG : Clinical Impact of this recent Imaging tool for the Diagnosis in Oncology |
| F-2 | M. Kapusta | Characterization of Hamamatsu S8550 APD Arrays for High-Resolution Scintillator Matrices Readout |

Session F (cont) PET & Medical

Chairman: Ph. Mangeot

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| F-3 | M. Casey | Analysis of Timing Performance for an APD LSO Scintillation Detector |
| F-4 | G. Pellegrini | Development of 3D detectors for medical imaging |
| F-5 | E. Lorenz | Evaluation of the new Hamamitsu S8550 APD array for the readout of scintillation fiber trackers |
| F-6 | D. Thers | Ionization Multiplier (IM): A new concept of gaseous detector for radiation detection improvement |

Session H: Other Applications

Chairman: M.Moszynski

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| H-1 | H. Kroha | Semi-transparent amorphous silicon strip sensors for high-precision optical alignment of tracking detectors |
| H-2 | A. Sellai | Resonant-cavity Schottky photodetectors with a grating profiled surface |
| H-3 | O. Siegmund | High resolution cross strip anodes for photon counting detectors |

H-4 A. Smith Single Crystal Transmission Mode Photocathodes Spanning the Spectral Range from UV to Extended NIR

Session H (cont): Other Applications

Chairman: C. Tao

H-5 B. Smith Development of Hybrid Photodetectors Using Single Crystal III-V Photocathodes

H-6 O. Evrard A novel photodiode array structure for gamma camera applications

H-7 E. Flyckt New microchannel-plate technology offers X-ray focusing - a micropore optic (MPO)

H-8 L. Consentino Ion micro-beam diagnostics with photodetectors

H-9 I. Sokolov Adaptive photodetectors for vibration monitoring

Closing Session

Chairman: G. Wormser

CL-1 P. Magnan CMOS-CCD

CL-2 T. Calligaro Photodetectors at Louvre : X-ray, γ -ray and charged particle spectrometry applied to art and archaeology issues

CL-3 P.Nedelec Conference Summary