

SPACE More high energy gamma sources

Ultra high energy (TeV) gamma rays have been observed by an international team working at the Whipple observatory in Arizona. These also correlate with some of the signals seen by NASA's big Gamma Ray Observatory (GRO) satellite launched by the Space Shuttle Atlantis last year.

High energy gamma rays could help pinpoint sources of cosmic rays. However gammas are readily absorbed by the upper layers of the atmosphere, and it was not until 1971 that the first point gamma source was identified, in the Crab pulsar. Continuing studies in the 1970s revealed more gamma sources, notably the puzzling 'Geminga' object in the Gemini constellation.

To explore the gamma ray sky as never before, the GRO project began in 1978, and was finally launched on 5 April 1991. GRO, at about 16 tons, is the heaviest scientific satellite launched to date (The Hubble Space telescope is 'only' 10.8 tons).

GRO carries four instruments – EGRET (Energetic Gamma Ray Telescope), COMPTEL (Compton Imaging Telescope), OSSE (Oriented Scintillation Spectrometer Experiment), and BATSE (Burst and Transient Source Experiment), between them covering a wide range of energies.

Soon after being switched on last year, COMPTEL registered a series of gamma ray bursts. Subsequently, in a series of International Astronomical Union (IUA) telegrams, the EGRET and Comptel teams have also reported a series of high energy gamma ray sources.

(COMPTEL covers energies up to 30 MeV, while EGRET continues into the TeV range.)

In several hours of observation with a high resolution imaging camera at the Whipple 10-metre optical reflector, a significant flux of extremely high energy gammas (above 0.5 TeV) was picked up by a US/Ireland/UK team. They were looking at Markarian 421, a compact object embedded in a giant elliptical galaxy 120 Megaparsecs away.

Physics Nobels at MIT for the 46th anniversary of MIT's Laboratory for Nuclear Science, 13-16 May. Left to right, Henry W. Kendall (1990), Jerome I. Friedman (1990), Steven Weinberg (1979) and Samuel C.C. Ting (1976).

(Photo Donna Coveney, MIT News Office)



Meetings

This year's DESY Theory Workshop, from 28-30 September, will cover 'Flavour physics'. Information from E.A. Paschos at Dortmund, e-mail UPHX01@DDOHRZ11.

Among the physics topics in the comprehensive programme of European Research Conferences organized by the European Science Foundation jointly with the Commission of the European Communities and the European Physical Society is Advanced Quantum Field Theory: Low Dimensional Field Theories, coordinated by R. Stora and to be held in Como from 23-27 September. Further information from Josip Hendekovic at the European Science Foundation, 1 quai Lezay-Marnesia, 67080 Strasbourg Cedex, France, phone +33 88 76 71 35, fax +33 88 36 69 87.



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C.N. Yang (centre) with his wife (right) and physicist Sau-Lan Wu at a dinner in Washington to celebrate his 70th birthday. Gauge theories and such things seem to be good for you.

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Above, neutrino specialists Fred Reines (left) and Ray Davis (right) received this year's Panofsky Prize of the American Physical Society (APS). They are seen here with APS President Ernest Henley.

Below, American Physical Society President Ernest Henley congratulates Kurt Gottfried of Cornell on winning the APS Leo Szilard Award.

(Photos Maurice Jacob)





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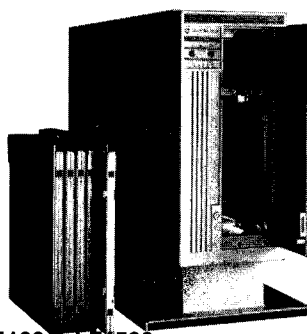
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Laser and Particle Beams (ISSN 0263-0346) is published in February, May, August and November. Volume 10 in 1992: £132 for institutions; £49 for individuals; delivery by airmail £23 per year extra.



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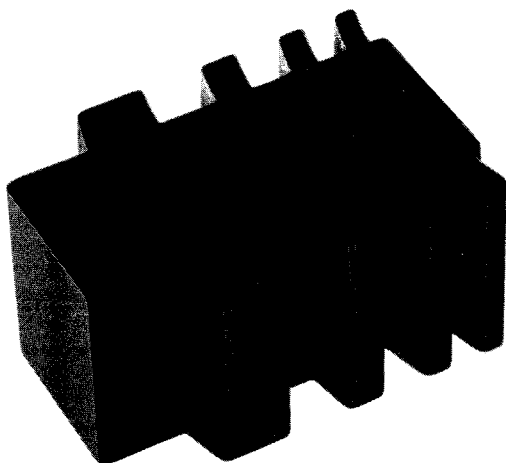
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A. H. Sullivan

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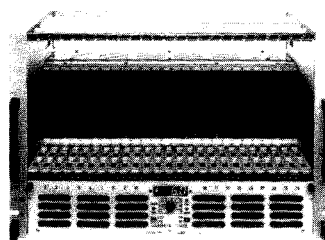
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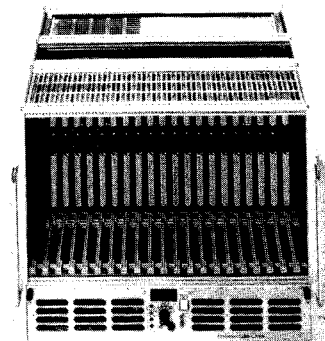
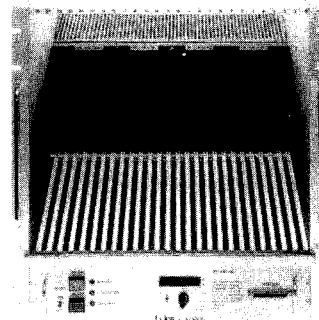
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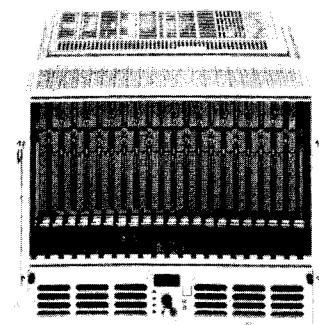
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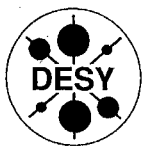
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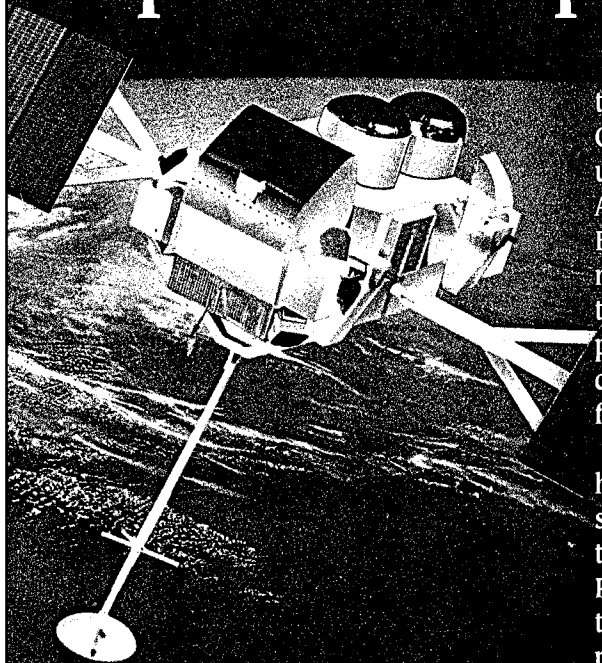


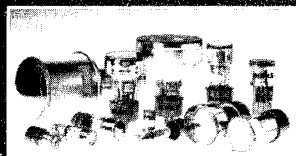
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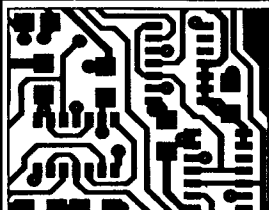
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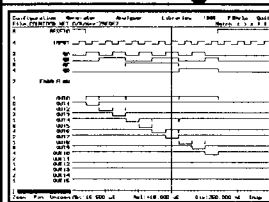
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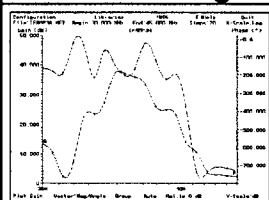
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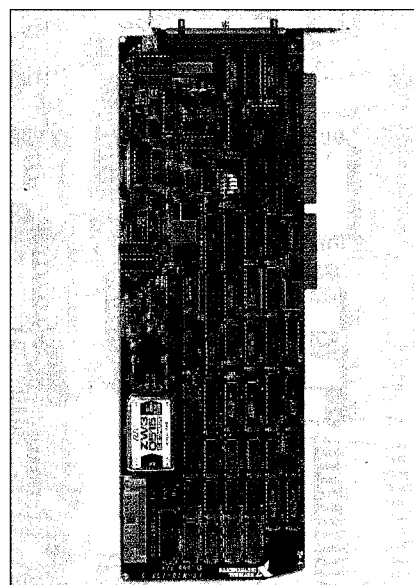
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Résumés and three letters of reference to: B. E. Bonner, Director
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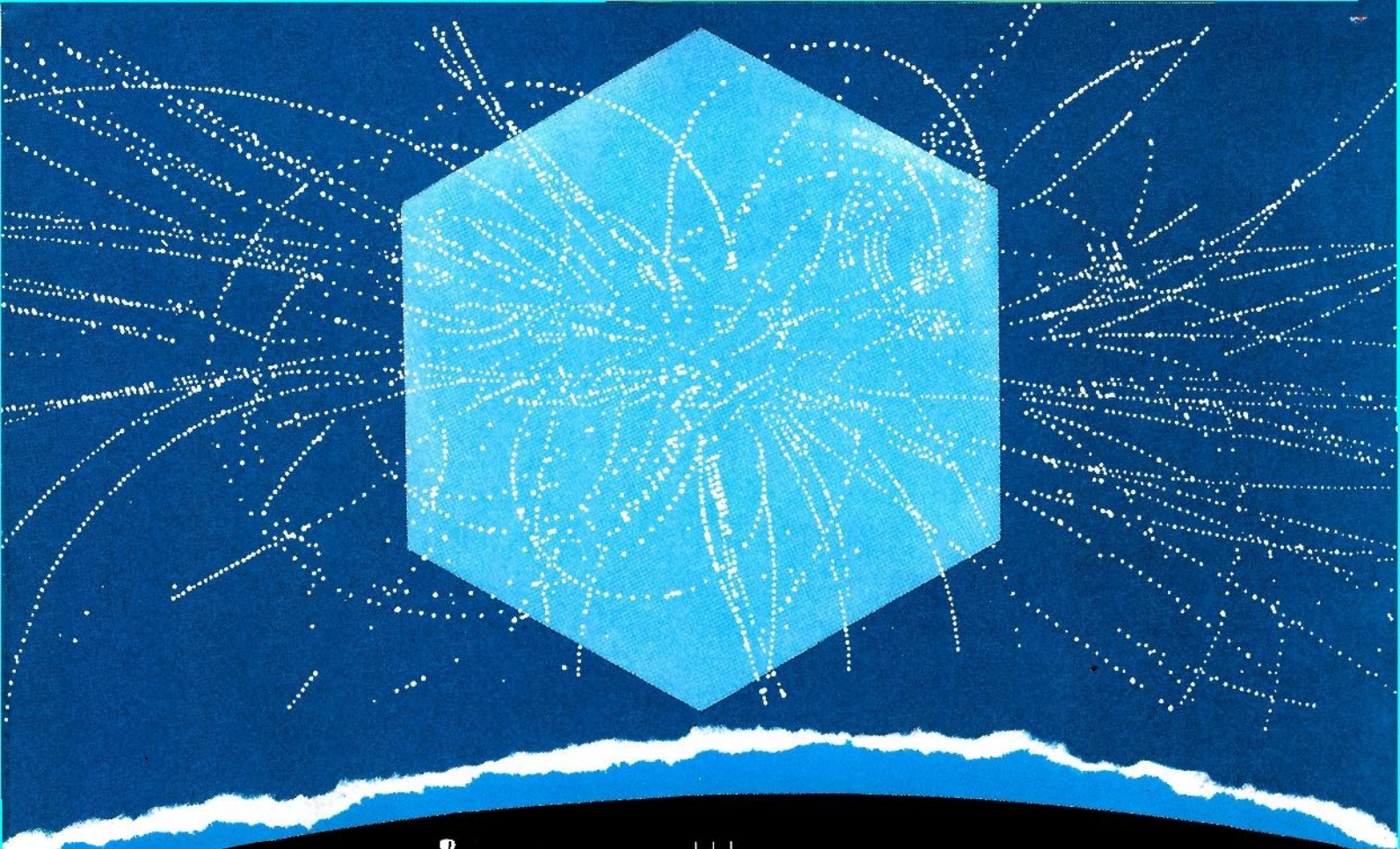
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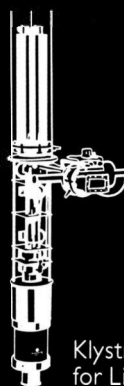
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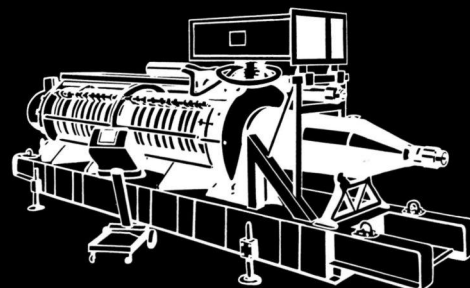
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