



Even archivists retire. On 30 September, CERN's diligent archivist **Roswitha Rahmy** left the laboratory after a long career. One of the objectives of the extensive archives is to preserve as much as possible of CERN's "living memory" on which the spirit of the laboratory draws. Roswitha has also played an important role in administering CERN's Pauli Collection, the comprehensive collection of Wolfgang Pauli papers entrusted to CERN, and on which CERN holds the copyright. CERN oversees the publication of Pauli's extensive scientific correspondence (October 1996, page 14).

Maldacena macarena

Theorists are excited about the conjecture put forward recently by Juan Maldacena of Harvard which greatly extends the application of multidimensional string theories to physical field theories.

The annual festival of the string community is the summer Santa Barbara meeting, for which theorist Jeff Harvey of Chicago composed a macarena-like song:

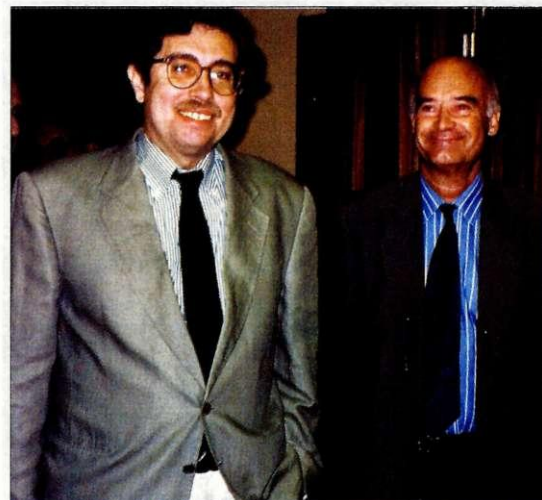
*You start with the brane
and the brane is BPS
Then you go near the brane
and the space is AdS
Who knows what it means
I don't I confess
Ehhhh! Maldacena!*

*Super Yang Mills
With very large N*

*Gravity on a sphere
flux without end
Who says they're the same
holographic he contends
Ehhhh! Maldacena!*

*Black holes used to be
a great mystery
Now we use D-brane
to compute D-entropy
And when D-brane is hot
D-free energy
Ehhhh! Maldacena!*

*M-theory is finished
Juan has great repute
The black hole we have mastered
QCD we can compute
Too bad the glueball spectrum
is still in some dispute
Ehhhh! Maldacena!*



Opening a recent international conference for physics students in Coimbra, Portugal, was Portuguese Science Minister and high-energy physicist **Jose Gago** (left). On the right is Rui Nogueira Lobo de Alarcão e Silva, rector of Coimbra University. The current president of the International Association of Physics Students, Nigel Harris, is moving from Cambridge to the UK Rutherford Appleton laboratory to join work on the Atlas experiment for CERN's LHC collider.

Fractional charges win Nobel Prize

The 1998 Nobel Physics Prize goes to three researchers for their discovery and subsequent explanation of how quantum conditions can generate quasiparticles carrying fractional electric charge.

The quantum Hall effect, discovered by Klaus von Klitzing in 1980 and for which he earned the 1985 Nobel Prize, gives a stepwise behaviour of the apparent electrical resistance at liquid-helium temperatures. These steps are independent of the material, being combinations of basic physical parameters divided by an integer. Horst L Störmer of Columbia and Daniel C Tsui of Princeton discovered in 1982 that powerful magnetic fields could induce additional structure in the quantum Hall effect, beyond those found by Klitzing, with fractional, as well as an integer dependence.

Robert Laughlin of Stanford was able to explain this as quasiparticles generated in a quantum fluid. As some of these quasiparticles can carry one-third of the normal electronic charge, there was talk of quarks. But quasiparticles are nothing to do with quarks (November 1997, page 24).

Bruno Touschek and the birth of electron-positron physics

On 16 November 1998 a special meeting at the Italian INFN's Frascati national laboratory will mark the 20th anniversary of the death of Bruno Touschek, recalling his life and his great contribution to physics, at the same time reviewing progress and perspectives of particle physics.

For more information see "<http://www.lnf.infn.it/conference/touschek.html>" or contact the Secretariat: M R Ferrazza - L Sirugo. Tel: +39 6-9403 2573/2418. Fax: +39 6-94032582. E-mail: "Dirlnf@lnf.infn.it".

Legion of Honour

Senior CERN physicist Pierre Darriulat has become "Chevalier" of the French Legion of Honour.

Fermilab conferences

From 26-29 May 1999 at Fermilab there will be a memorial symposium "Inner Space/Outer Space II" for astrophysicist and cosmologist David Schramm who died in an airplane accident in December 1997.

From 5-8 October next year, Fermilab will host the traditional seminar on "Future Perspectives in High Energy Physics" organized by the International Committee for Future Accelerators, ICFA. Attendance is by invitation only.

See "<http://www-ppd.fnal.gov/conferences/icfasem99/announce.html>" or e-mail "icfasem99@fnal.gov".

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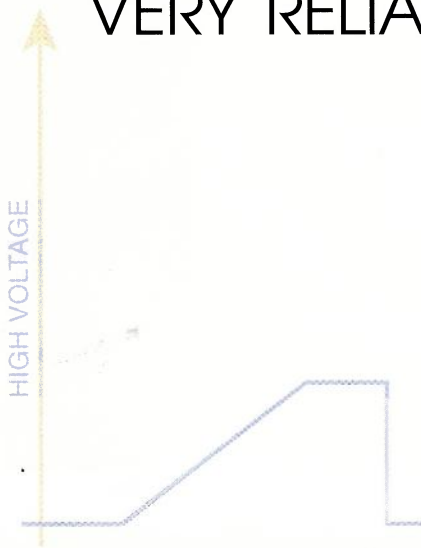


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