V I.F.T.- U.A.M. Christmas Workshop on Particle Physics

Madrid, 20, 21 and 22 December 1999

Organizing Comitee:

- Belén Gavela (I.F.T.-U.A.M.)
- César Gómez (I.F.T.-C.S.I.C.)
- Luis Ibáñez (I.F.T.-U.A.M.)
- Tomás Ortín (I.F.T.-C.S.I.C.)
- Mariano Quirós (I.F.T.-C.S.I.C.)

List of Invited Speakers:

(Updated December 16th 1999)

- Ignatios Antoniadis (École Polytechnique)
- Andrea Donini (U.A.M.)
- Roberto Emparán (E.H.U.)
- Emidio Gabrielli (U.A.M.)
- Jaume Garriga (U.A.B.)
- Pilar Hernández (C.E.R.N.)
- Rafael Hernández (I.C.T.P.)
- Bert Janssen (I.F.T./C.S.I.C.)
- Shaaban Khalil (U.A.M.)
- Esperanza López (C.E.R.N.)
- Yolanda Lozano (C.E.R.N.)

- John March-Russell (C.E.R.N.)
- Esther Morales (U.A.M.)
- Olivier Pène (LPTHE, Orsay)
- Sergei T. Petcov (SISSA/INFN-Trieste)
- Alex Pomarol (C.E.R.N. & U.A.B.)
- Stefano Rigolin (U.A.M.)
- Graham G. Ross (Oxford U.)
- Emilio Torrente (U.A.M.)
- Ángel M. Uranga (C.E.R.N.)
- Miguel Ángel Vázquez-Mozo (Amsterdam U. & Spinoza I.)
- Herman verlinde (Princeton U. & Amsterdam U.)

List of Participants:
(Updated December 16th 1999)

- Natxo Alonso Alberca (I.F.T./U.A.M.)
- José Delclaux (I.F.T./U.A.M.)
- Manuel Donaire
- Ernesto Lozano Tellechea (I.F.T./U.A.M.)
- Juan Manjarín Colón (U.A.M.)
- Patrick Meessen (I.F.T./U.A.M.)
- Raúl Rabadán (U.A.M.)
- Pedro Silva Briceño (U.A.X.)
- Óscar Vives (Sissa)

Schedule

(Updated December 20th 1999)

Monday 20th

Chairindividuals: L. Ibá nez (morning) & B. Gavela (afternoon).

(10:00-11:00) John March-Russell (*C.E.R.N.*)

Challenges and Opportunities of Low-Scale String Theory.

Wellcome Coffee

(11:30-12:00) Andrea Donini (*U.A.M.*)

Winding Modes and Extra Dimensions at 1 TeV.

(12:00-12:30) Shaaban Khalil (*U.A.M.*)

Supersymmetric CP Violation in Type I String-Derived Models.

(12:30-13:00) Stefano Rigolin (*U.A.M.*)

Future Discoveries and Precission in Neutrino Oscilations.

Lunch

(15:00-16:00) Olivier Pène (*LPTHE, Orsay.*)

Computing α_s from QCD Green Functions.

Coffee break

(16:30-17:30) Alex Pomarol (*C.E.R.N. & U.A.B.*)

TeV Physics of Extra Dimensions.

(17:30-18:00) Esther Morales (*U.A.M.*)

EW Symmetry Breaking Sector at High Energy Colliders.

(18:00-18:30) Emidio Gabrielli (*U.A.M.*)

Bounds on Leptoquarks from μ and τ Lepton Rare Processes.

Tuesday 21st

Chairpersons: M. Quirós (morning) & C. Gómez (afternoon).

(10:00-11:00) Ignatios Antoniadis (*École Polythechnique.*)

Large Dimensions and String Physics at a TeV.

Coffee Break

(11:30-12:00) Bert Janssen (*I.F.T.-C.S.I.C.*)

Dilatonic Randall-Sundrum Solutions.

(12:00-12:30) Roberto Emparán (*E.H.U.*)

Black Holes on Brane-Worlds.

(12:30-13:00) Ángel Uranga (*C.E.R.N.*)

Tachyon-Free Non-Supersymmetric Orientifolds.

Lunch

(15:00-16:00) Herman Verlinde (*Princeton U. & Amsterdam U.*)

Holography and Compactification.

Coffee break

(16:30-17:30) Jaume Garriga (*U.A.B.*)

Gravity in the Brane-World.

(17:30-18:00) Esperanza López (*C.E.R.N.*)

The Thermodynamic Potentials of Kerr-AdS Black Holes and their CFT Duals.

Wednesday 22nd

Chairpersons: T. Ortín (morning) & A. González-Arroyo (afternoon).

(10:00-11:00) Graham G. Ross (*Oxford U.*)

Warped Phenomenology.

Coffee Break

(11:30-12:00) Yolanda Lozano (*C.E.R.N.*)

NS-NS Branes as Topological Solitons in Brane-Antibrane Systems.

(12:00-12:30) Miguel Ángel Vázquez-Mozo (*Amsterdam U. & Spinoza I.*)

M-Theory Resolution of Cosmological Singularities Via U-Duality.

(12:30-13:00) Rafael Hernández (*I.C.T.P.*)

Calibrated Geometries and Non Perturbative Superpotentials in M-Theory.

Lunch

(15:00-16:00) Sergei T. Petcov (*SISSA/INFN-Trieste*)

New Effect of Total Neutrino Conversion in a Medium of Nonperiodic Constant Density Layers and in the Earth.

Coffee break

(16:30-17.30) Pilar Hernández (*C.E.R.N.*)

Chiral Symmetry Breaking with Ginsparg-Wilson Fermions.

(17:30-18:00) Emilio Torrente (*C.E.R.N.*)

Is the Neutrino a Majorana Particle? (Bound on Antineutrino Fluxes from SuperKamiokande).

For more information (maps, train schedules etc.), consult our web pages `http://gesalerico.ft.uam.es` e-mail the organizers at `tomas@leonidas.imaff.csic.es` or phone

+34-91-397 8541, 8546 or 8557 (fax-answering machine)