First circular: The 27th Texas Symposium on Relativistic Astrophysics
Dallas, Texas, December. 8-13, 2013.

To Astrophysicists, Cosmologists and Relativists everywhere:

You are most cordially invited to this special and historically significant Jubilee Texas Symposium on Relativistic Astrophysics, celebrating the fiftieth anniversary, almost to the day, of the first of these biennial Texas Symposia held in Dallas in December 1963.

The registration and abstract submission are now open and available at:

http://nsm.utdallas.edu/texas2013

The format of our meeting will be what it has always been: 20 or more plenary talks and room for up to 350 contributed talks, plus posters, essentially on all matters of current and traditional interest. Naturally there will also be a small but not preponderant historical component, as befits the occasion.

The topics of the symposium will include:

Cosmology: Cosmic acceleration/dark energy; Cosmic microwave background; Galaxy formation and reionization; Inhomogeneous exact cosmologies; Large-scale surveys; Quantum gravity/cosmology and string cosmology; Weak gravitational lensing; Experimental/observational cosmology - other topics; Theoretical cosmology - other topics

Compact objects and galactic/cluster scales: Black holes, mergers, and accretion discs; Galaxy evolution and supermassive black holes; Imaging black holes; Microlensing and exoplanets; Neutron stars, pulsars, magnetars, and white dwarfs; Singularities; Strong gravitational lensing; Supermassive black hole binaries; Tidal disruption of stars by supermassive black holes; Compact object observations - other topics; Compact object theory - other topics;

High-energy astrophysics and astroparticle physics: Active galactic nuclei and jets; Cosmological implications of the Higgs and the LHC; Dark matter astrophysics; Dark matter experiments and data; Gamma-ray bursts, SNe connection, and sources; High-energy cosmic rays (VHE, UHE, mechanisms, etc.); High-energy gamma-rays; Supernovae and their remnants; High-energy astrophysics/astroparticle physics - other topics

Testing general relativity and modified gravity: Alternative theories of gravity; Strong-field tests of general relativity; Testing general relativity at cosmological scales; Testing general relativity - other topics; Modified gravity - other topics;

Gravitational waves: Electromagnetic counterparts of gravitational wave sources; Ongoing and planned gravitational wave experiments; Gravitational wave theory and simulations; Results and progress from gravitational wave searches; Gravitational waves - other topics

Numerical relativity: Locating black hole horizons; Numerical simulations; Relativistic magnetohydrodynamics; Numerical relativity - other topics

Other ongoing and future experiments and surveys:
ACT, AMS, BOSS, CFHT, Chandra, DES, Euclid, Fermi, HEDEX, HSC, JWST, LHC, LSST, NuSTAR, Pan-STARRS, Planck, SDSS, SKA, SPT, WFIRST, WMAP (the list will be updated as abstracts and suggestions are submitted)

Other topics in experimental/observational relativity

Other topics in theoretical relativity

Other topics of relevance to relativistic astrophysics

History of relativistic astrophysics

History of the Texas Symposium and interface with other anniversaries

The Kerr solution - 50 years later

The venue of the Symposium is the Fairmont Hotel in the heart of downtown Dallas. It has several restaurants and a Starbucks Café and is known for its quiet comfort and elegance, plus its great location in the Arts District. It is within walking distance to the new Perot Museum of Nature and Science and all the other museums, the Symphony, the Opera, the Wyly Theatre, and the West End Historical District. The nearby lively Uptown with its shops and restaurants can be quickly reached via the complimentary McKinney Ave Trolley.

The Scientific Organizing Committee for the Meeting:
Wolfgang Rindler, Mustapha Ishak - Co-Chairs (U. of Texas at Dallas, USA), Odylio Aguiar (INPE, Brazil), John Barrow (U. of Cambridge, UK), Rong Gen Cai (Chinese Academy of Sciences, China), Manuela Campanelli (Rochester Institute of Technology, USA), Thibault Damour (IHES, France), George Ellis (U. of Cape Town, South Africa), Wendy Freedman (Carnegie Observatories, USA), Vicky Kaspi (McGill U., Canada), Rocky Kolb (U. of Chicago, USA), Kayll Lake (Queen's U. at Kingston, Canada), Avi Loeb (Harvard U., USA), Thanu Padmanabhan (IUCAA, India), Tsvi Piran (The Hebrew University, Israel), Martin Rees (U. of Cambridge, UK), Jurgen Renn (MPIWG, Germany), Frank Rieger (MPIK, Germany), Remo Ruffini (ICRA, Italy), Misao Sasaki (Kyoto University, Japan), Bernard Schutz (MPIGP - Germany), Douglas Scott (UBC, Canada), Joseph Silk (U. of Oxford, UK), David Spergel (Princeton U., USA), Alexey Starobinsky (Landau Institute, Russia), Paul Steinhardt (Princeton U., USA), Henry Tye (University of Science and Technology, Hong Kong), Virginia Trimble (U. of California at Irvine, USA), Steven Weinberg (University of Texas at Austin, USA).

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