



## **XVII SIGRAV Conference**

by *L.Fatibene, M.Francaviglia, A. Tartaglia*

### **Plenary Lectures**

- ◇ M. Burgay, M. Kramer, I. H. Stairs, A. Possenti, R. N. Manchester, M. A. McLaughlin, A. G. Lyne, R. D. Ferdman, D.R. Lorimer, N. DAMICO, F. Camilo, P. C. C. Freire, *The Double Pulsar System J0737-3039A/B as Testbed for Relativistic Gravity*
- ◇ C. Dappiaggi, *Holography in asymptotically flat spacetimes: new results and perspectives*
- ◇ Salvatore Capozziello, *Dark energy and dark matter as curvature effects*
- ◇ S.Bellucci, S.Ferrara, A.Marrani, *Attractor Horizon Geometries of Extremal Black Holes*
- ◇ Adalberto Giazotto, *Some Ideas on Advanced Gravitational Wave Detectors: Winning the Standard Quantum Limit with Light Squeezing*
- ◇ Sigfrido Leschiutta, *Relativity: from Fundamental Research to technological Applications Metrology, positioning, navigation, communications, But also and again fundamental physics*
- ◇ L. Lusanna, *The York map in tetrad gravity* ([slides](#))
- ◇ Annalisa Marzuoli, *Quantum complexity of Chern-Simons field theory* ([slides](#))
- ◇ V.Moretti, *Some recent results in linear scalar quantum field theory in globally hyperbolic asymptotically flat spacetimes*
- ◇ R. Passaquieti et al., *The Status of Virgo*
- ◇ M. Pauri, *Weak objectivity of space-time* ([slides](#))
- ◇ M.Trigiane, *Dual Gauged Supergravities*

### **Workshop A: Classical and Quantum Gravity**

- ◇ Giuseppe Bimonte, Enrico Calloni, Giampiero Esposito, Luigi Rosa, *Push on a Casimir apparatus in a weak gravitational field*
- ◇ Luca Fabbri, *Spontaneous Breaking of Conformal Invariance in Higher-Order Theories of Gravitation*
- ◇ R. Giambò, F. Giannoni, G. Magli, *Existence of solutions for homogeneous scalar fields in GR: a calculus*

*of variations approach*

- ◇ M.Carfora, C.Dappiaggi, V.L.Gili, *From random Regge triangulations to open strings*
- ◇ J.Kijowski, G.Magli, D.Malafarina, *The dynamical behavior of spherically symmetric thin shells with general equation of state*
- ◇ Leonardo Modesto, *Loop quantum gravity and black hole singularity*
- ◇ Marcello Ortaggio, *Higher dimensional spacetimes with a geodesic, shearfree, twistfree and expanding null congruence*
- ◇ Roberto Percacci, *Towards a Quantum Field Theory of Gravity*
- ◇ Galliano Valent, Hamed Ben Yahia, *W algebras and Bianchi I I metrics*

**Workshop B:** Astrophysics and Cosmology

- ◇ Salvatore Capozziello, Christian Corda, Mariafelicia De Laurentis *The response of interferometers to scalar gravitational waves arising from scalar-tensor theories of gravity*
- ◇ L. Gualtieri, *Gravitational waves from oscillations of relativistic stars*
- ◇ R. Salvaterra, *Quasars in the early Universe*
- ◇ A.Tartaglia, M.Capone, *A darkless spacetime*

**Workshop C:** Experimental Gravity

- ◇ M.Bassan, A.DeWaard, G.Frossati, S.Gianní, Y.Minenkov, L. Quintieri, R.Simonetti, *Acoustic properties of a hollow sphere for gravitational wave detection*
- ◇ G. Ferrari, A. Bertoldi, M. de Angelis, L. Cacciapuoti, R.E. Drullinger, G. Lamporesi, N. Poli, M. Prevedelli, F. Sorrentino, G.M. Tino, *Atom interferometry for precision tests of gravity: Measurement of G and test of Newtonian law at micrometric distances*