



## Preprints - 1999

1. "LiVwV, Cosmic Rays and Gamma-Ray Line Astronomy," R. Ramaty, E. Vangioni-Flam, M. Casse, and K. Olive.
2. "Surviving on the Slope: SUSY Vacuum in the Theories Where it is Not Supposed to Be," G. Dvali and M. Shifman.
3. "Tilting the Brane, or Some Cosmological Consequences of the Brane Universe," G. Dvali, M. Shifman.
4. "Phenomenological Issues in TeV Scale Gravity with Light Neutrino masses," A. Faraggi and M. Pospelov
5. "Small-x F2 Structure Function of a Nucleus Including Multiple Pomeron Exchanges," Yu. Kovchegov
6. "Quantum Mchanics from the Equivalence principle Higher Dimensions," G. Bertoldi, A. Faraggi and M. Matone
7. "Relations Between Inclusive Decay Rates of Heavy Baryons," M. B. Voloshin
8. "Instantons Versus SUSY: Fifteen Years After," M. Shifman and A. Vainshtein
9. "On the Relevance of Singular Solutions in dS3 and AdS3 Gravity," B. Tekin
10. "Diffractive Structure Function in a Quasi-Classical Approximation," by Yu. Kovchegov and L. McLerran
11. "LiBeB and Big Bang Nucleosynthesis," K. A. Olive
12. "Initial Conditions for Parton Cascades," L. McLerran
13. "Three Lectures on the Physics of Small x and High Gluon Density," L. McLerran
14. "LiBeB, Cosmic Rays & Gamma-Ray Line Astronomy: Concluding Remarks II," E. Vangioni-Flam, R. Ramati, M. Casse, K. Olive.
15. "Big Bang Nucleosynthesis," K. Olive
16. "The Galactic Evolution of Beryllium and Boron," B. D. Fields, K. A. Olive
17. "On Modular Invariance and 3D Gravitational Instantons," T. Brotz, M. Ortiz and A. Ritz.
18. "On the Realization of Assisted Inflation," P. Kanti and K. Olive

19. "The Theta Term in QCD Sum Rules and the Electric Dipole Moment of the Vector Meson," M. Pospelov and A. Ritz.
20. "Exact Results in Gauge Theories: Putting SUSY to Work," M. Shifman.
21. "Junctions and the Fate of Branes in External Fields," A. Gorsky, K. Selivanov
22. "A Minimal Superstring Standard Model I: Flat Directions," G. Cleaver, A. Faraggi and 23. D. Nanopoulos
23. "MSSM Prediction for the Electric Dipole Moment of the Hg Atom," T. Falk, K. Olive, 25. M. Pospelov and R. Roiban.
24. "Theta-Induced Electric Dipole Moment of the Neutron via QCD Sum Rules," M. Pospelov and A. Ritz
25. "Primordial Lithium and Big Bang Nucleosynthesis," S. G. Ryan, T. C. Beers, K. A. Olive
26. "Unitarization of the BFKL Pomeron on a Nucleus," Y. V. Kovchegov
27. "Gödel-type Universes in String-inspired Charged Gravity," P. Kanti, C. E. Vayonakis
28. "Calculations of Neutralino-Straw Coannihilation Channels and the Cosmologically Relevant Regions of MSSM Parameter Space," K. Olive, J. Ellis, T. Falk, M. Srednicki
29. "Primordial Nucleosynthesis: Theory and Observations," K. Olive, G. Steigman, T. P. Walker
30. "How penguins Started to Fly," A. Vainshtein
31. "Assisted Chaotic Inflation in Higher Dimensional Theories," P. Kanti and K. Olive
32. "Probing the Desert with Ultra-Energetic Neutrinos from the Sun," A. Faraggi, K. Olive and M. Pospelov.
33. "A Note on Classical String Dynamics on AdS<sub>3</sub>," M. Bañados, A. Ritz
34. "Theta Vacua in QCD Sum Rules and Nucleon Electric Dipole Moments," M. Pospelov and A. Ritz.
35. "D-term Spectroscopy in Realistic Heterotic String Models," A. Dedes, and A. Faraggi.
36. "Variations of the Neutralino Elastic Cross-Section with CP Violating Phases," T. Falk, A. Ferstl and K. A. Olive.
37. "More on Tensorial Central Charges in N=1 Supersymmetric Gauge Theories (BPS Wall Junctions and Strings)," A. Gorsky and M. Shifman.
38. "BPS Walls and Junctions in a Model for Large N Supersymmetric Gluodynamics," G. Gabadadze and M. Shifman.
39. "Cosmology I: From the Planck Time to BBN," K. A. Olive.

40. "Reducing Model Dependence of Spectator Effects in Inclusive Decays of Heavy Hadrons," M. B. Voloshin.
41. "BPS Saturated Solitons in N=2 Dimensional Theories on RNS Domain Walls in Theories with Compactified Dimensions," X. Hou, A. Losev and M. Shifman.
42. "Superstring phenomenology&mdash;A Personal Perspective," A. Faraggi
43. "Instantons at Strong Coupling, Averaging Over Vacua and the Gluino Condensate," A. Ritz, A. Vainshtein.
44. Probing Cosmic Ray Origin with Beryllium and Boron," B. D. Fields, K. A. Olive.
45. "Cosmological 3-Brane Solutions," P. Kanti, I. Kogan, K. Olive and M. Pospelov (submitted as 40)
46. "Minimal Superstring Standard Model Phenomenological Study," G. Cleaver and A. Faraggi, D. Nanopoulos and J. Walker
47. "Hadron Electric Dipole Moments from CP-Odd Operators of Dimension Five via QCD Sum Rules: The Vector Meson," M. Pospelov and A. Ritz.
48. "Do Stringy Corrections Stabilize Colored Black Holes," P. Kanti, E. Winstanley
49. "Introduction to Supersymmetry: Astrophysical and Phenomenological Constraints," K. A. Olive.
50. "A Short Course on Big Bang Nucleosynthesis," K. A. Olive.
51. "Testing Spallation Processes with Beryllium and Boron," B. D. Fields, K. A. Olive, E. Vangioni-Flan and M. Casse.
52. "How natural is a small Theta bar in left-right SUSY Models?" M. Pospelov
53. "A Higgs or Not a Higgs? What to Do if you Discover a New Scalar particle," C. P. Burgess, J. Matias and M. Posplov.
54. "Single-Brane Cosmological Solutions with a Stable Compact Extra Dimensions," P. Kanti, I. Kogan, K.A. Olive and M. Pospelov.
55. "Single Electron Tunneling," L. I. Glazman.
56. "Mesoscopic Fluctuations of Co-Tunneling and Kondo Effect in Quantum Dots," L.I. Glazman.
57. "Kondo Effect and Spin-Charge Separation in Quantum Dots," L.I. Glazman, F.W.J. Hekking and A.I. Larkin.
58. "Calculating the Tension of Domain Wall Junctions and Vortices in Generalized Wess-Zumino Models," M. Shifman and T. Ter Veldhuis.
59. "Domain Wall Junctions in a Generalized Wess-Zumino Model," D. Binosi, T. ter Veldhuis.
60. "Theta Angle Versus CP Violation in the Leptonic Sector," A. Dedes and M. Pospelov.

61. "SUSY Dark matter and the Energy of a Linear Electron-Positron Collider," J. Ellis, G. Ganis and K. A. Olive.