

## LIST OF PUBLICATIONS

Dr ML Walker

### Journal Publications:

"The flux-based PIN allocation mechanism can generate either canalized or diffuse distribution patterns depending on geometry and boundary conditions", by M.L. Walker, E. Farcot, J. Traas and C. Godin, PLoS ONE (to appear January 2013).

"Reservoir boundaries in Brownian dynamics simulations of ion channels", by B. Corry, M. Hoyles, T. Allen, M. Walker, S. Kuyucak and S.H. Chung, Biophysical Journal 82, 1975-1984, (2002).

"Emergent Dynamics of Five-Colour QCD Due to Dimensional Frustration", by M.L. Walker *Symmetry* **2010**, 2(3), 1322-1337; doi:10.3390/sym2031322.

"Extending SU(2) to SU(N) QCD, by ML Walker, Phys. Lett. B662, 383-387, arXiv:0706.3951 [hep-th], (2008).

"Higgs-free confinement hierarchy in five-color QCD", by M.L. Walker, Progress of Theoretical Physics Vol. 119, No 1. arXiv:0707.2626 [hep-th].

"Stability of the Magnetic Monopole Condensate in three- and four-colour QCD", by M.L. Walker, JHEP01(2007)056; hep-th/0605103.

"Light Propagation Effects in QED:Effective Action Approach", by Y.M. Cho, D.G. Pak and M.L. Walker, Phys. Rev. D 73 065014 (2006); hep-th/0603031

"Monopole Condensation and Confinement in SU(2) QCD", by Y.M. Cho and M.L. Walker, hep-th/0206127, Mod. Phys. Lett. A, Vol. 19, No. 36 (2004) 2707-2726.

"A Completely Invariant SUSY transform of supersymmetric QED", M.L. Walker, hep-th/0310098, J. Phys. G. 30 (2004), 1219.

"Stability of Monopole Condensate in SU(2) QCD", by Y.M. Cho, M.L. Walker, and D.G. Park, hep-th/0209208, JHEP 05(2004)073.

"Supersymmetry and Chiral Symmetry", M.L. Walker, JHEP12(2004)011; hep-th/9912110.

"Nonperturbative Vertices in Supersymmetric Quantum Electrodynamics",  
M.L. Walker and C.J. Burden, hep-th/9904144, Phys. Rev. D 60, 105018 (1999).

"Chiral Symmetry in Supersymmetric Three Dimensional Quantum Electrodynamics",  
M.L. Walker and C.J. Burden, hep-th/9901070, Phys. Rev. D 59, 125013 (1999).

Two entries in "Concise Encyclopedia of Supersymmetry", editors: Steven Duplij, Warren Siegel, Jonathon Bagger, Kluwer Academic Publishers 2004.

**Invited paper:**

"Emergent Dynamics of Five-Colour QCD Due to Dimensional Frustration", by ML Walker, *Symmetry* 2010, 2, 1322-1337.

"Intermediate energy spectrum of five colour QCD at one loop", by  
ML Walker, chapter invited by Nova publishing for book entitled "Research in High Energy  
Physics Advances", arXiv:0710.1933 [hep-th].

**Refereed Conference Proceedings and Poster Presentations:**

"A theoretical study of flux-based PIN models", invited seminar at Agropolis, Montpellier, 11  
May, 2012.

"Modelling the Shoot Apical Mersitem", presentation at "Premier colloque NUMEV",  
Montpellier, 25 November, 2011.

"Toward a unified PIN allocation model in the SAM of *arabidopsis thaliana*", M.L. Walker, E.  
Farcot, J. Traas and C. Godin, poster at Plant Growth and Modelling, Elche, Spain, 19th-21st  
September, 2011.

"Monopole Condensate Stability in three- and four-colour QCD", M.L. Walker, proceedings of  
the seventh Conference on Quark Confinement and the Hadron Spectrum, 2-7 September 2006.

"Supersymmetric Ward identities and chiral symmetry breaking in SUSY QED",  
M.L. Walker, proceedings of the Johns Hopkins Workshop on Nonperturbative  
Methods and their Applications, 19th - 21st August 2000.

"Chiral Symmetry in Supersymmetric QED3", by M.L. Walker and C.J. Burden, proceedings of the 1998 "Workshop on Non-Perturbative Methods in QFT", World Scientific Press.

"Stability of Monopole Condensate in SU(2) QCD", by Y.M. Cho and M.L. Walker, Proceedings of XXIV International Congress on Group Theoretical Methods in Physics.