

DEREK BRUCE LEINWEBER  
Publications

## Publications Overview

- Editor of 4 international conference proceedings.
- Published 4 book chapters.
- Published 100 articles in refereed journals.
- Published 99 articles as refereed conference proceedings.
- Published 10 articles as conference proceedings.
- Published 16 newspaper articles
- Articles have 3613 citations in the SPIRES HEP Database.
- 15 articles are classified as *well-known* with more than 50 citations.
- 3 articles are *very well-known* with more than 100 citations.
- Published articles average 27 citations per paper in the SPIRES HEP Database.
- Hirsch's h-index is 35.

## Publications Summary: 2002 to present

Publication Type	Number	Journal/Publisher	Impact Factor
<b>Refereed Book Chapters</b>	4	Lect. Notes Phys.	N/A
<b>Editorial Works</b>	3	Nucl. Phys. B (Proc. Supp.)	5.199
	1	Lect. Notes Phys.	N/A
<b>Refereed Journal Articles</b> (Total: 61)	3	Phys. Rev. Lett.	7.072
	37	Phys. Rev. D	4.896
	1	J. High Energy Phys. (JHEP)	5.393
	1	Nucl. Phys. B	5.199
	4	Phys. Lett. B	5.043
	3	Phys. Rev. C	3.327
	2	Annals Phys.	3.019
	10	Other	
<b>Refereed Conference Proceedings</b> (Total: 75)	45	Nucl. Phys. B (Proc. Supp.)*	0.875
	5	Nucl. Phys. A*	2.155
	25	Other	
<b>Unrefereed Conference Proceedings</b>	4	World Scientific / Other	
<b>Newspaper Articles</b>	16	The Advertiser	
<b>6-Year Total</b>	164	<b>6-Year Total Refereed</b>	136
<b>Career Total</b>	233	<b>Career Total Refereed</b>	199

\*Refereed conference proceedings in Nuclear Physics are required to contain new previously unpublished material.

## Very Well Known Refereed Publications (100+ Citations)

3. **“Asymptotic scaling and infrared behavior of the gluon propagator”**  
D. B. Leinweber, J. I. Skullerud, A. G. Williams and C. Parrinello [UKQCD Collaboration]  
Phys. Rev. D **60**, 094507 (1999) 17 pp. [arXiv:hep-lat/9811027]
2. **“Infinite volume and continuum limits of the Landau-gauge gluon propagator”**  
F. D. R. Bonnet, P. O. Bowman, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
Phys. Rev. D **64**, 034501 (2001) 10 pp. [arXiv:hep-lat/0101013]
1. **“Electromagnetic structure of octet baryons”**  
D. B. Leinweber, R. M. Woloshyn and T. Draper  
Phys. Rev. D **43**, 1659 (1991) 20 pp.

## Publications – Submitted to Refereed Journals

4. **“Realistic Lattice Determination of  $\alpha_s(M_Z)$  Revisited”**  
K. Maltman, D. Leinweber, P. Moran and A. Sternbeck  
arXiv:0807.2020 [hep-lat] 14 pp.
3. **“Preconditioning Maximal Center Gauge with Stout Link Smearing in SU(3)”**  
A. O’Cais, W. Kamleh, K. Langfeld, B. Lasscock, D. B. Leinweber, P. J. Moran, A. Sternbeck, L. von Smekal  
arXiv:0807.0264 [hep-lat] 9 pp.
2. **“Strange magnetic form factor of the proton at  $Q^2 = 0.23 \text{ GeV}^2$ ”**  
P. Wang, D. B. Leinweber, A. W. Thomas and R. D. Young  
arXiv:0807.0944 [hep-ph] 11 pp.
1. **“Center vortices and the quark propagator in SU(2) gauge theory”**  
P. O. Bowman, K. Langfeld, D. B. Leinweber, A. O’ Cais, A. Sternbeck, L. von Smekal and A. G. Williams  
arXiv:0806.4219 [hep-lat] 7 pp.

## Publications – Books

4. **“LC 2005, Proceedings of the Cairns Topical Workshop on Light-Cone QCD and Non-perturbative Hadron Physics”**  
D. B. Leinweber, L. von Smekal and A. G. Williams  
Nucl. Phys. B (Proc. Supp.) **161** (2006) 258 pp.
3. **“Lattice Hadron Physics”**  
A. C. Kalloniatis, D. B. Leinweber and A. G. Williams  
Lect. Notes Phys. **663**, 1 (2004) 230 pp.
2. **“Lattice hadron physics. Proceedings, 2nd Topical Workshop, LHP 2003, Cairns, Australia, July 22-30, 2003”**  
A. C. . Kalloniatis, D. B. . Leinweber and A. G. . Williams  
Nucl. Phys. Proc. Suppl. **128** (2004) 252 pp.
1. **“Lattice Hadron Physics. Proceedings, Workshop, LHP 2001, Cairns, Australia, July 9-18, 2001”**  
A. C. Kalloniatis, D. B. Leinweber, W. Melnitchouk and A. G. Williams  
Nucl. Phys. Proc. Suppl. **109A** (2002) 230 pp.

## Publications – Refereed Book Chapters

4. **“Quark Propagator from LQCD and its Physical Implications”**  
P. O. Bowman, U. M. Heller, D. B. Leinweber, A. G. Williams and J. B. Zhang  
Lect. Notes Phys. **663**, 17 (2005) 47 pp.
3. **“Baryon spectroscopy in lattice QCD”**  
D. B. Leinweber, W. Melnitchouk, D. G. Richards, A. G. Williams and J. M. Zanotti  
Lect. Notes Phys. **663**, 71 (2005) 42 pp. [arXiv:nucl-th/0406032].
2. **“Hadron Structure and QCD: Effective Field Theory for Lattice Simulations”**  
D. B. Leinweber, A. W. Thomas and R. D. Young  
Lect. Notes Phys. **663**, 113 (2005) 17 pp.
1. **“Hadron properties with FLIC fermions”**  
J. M. Zanotti, D. B. Leinweber, W. Melnitchouk, A. G. Williams and J. B. Zhang  
Lect. Notes Phys. **663**, 199 (2005) 27 pp. [arXiv:hep-lat/0407039].

## Publications – Refereed Journals

100. **“Impact of Dynamical Fermions on QCD Vacuum Structure”**  
P. J. Moran and D. B. Leinweber  
Accepted 11 August 2008 in Phys. Rev. D (2008) 9 pp. [arXiv:0801.2016 [hep-lat]]
99. **“Over-Improved Stout-Link Smearing”**  
P. J. Moran and D. B. Leinweber  
Phys. Rev. D **77**, 094501 (2008) 9 pp. [arXiv:0801.1165 [hep-lat]]
98. **“Vacuum structure revealed by over-improved stout-link smearing compared with the overlap analysis for quenched QCD”**  
E. M. Ilgenfritz, D. Leinweber, P. Moran, K. Koller, G. Schierholz and V. Weinberg  
Phys. Rev. D **77**, 074502 (2008) 12 pp. [arXiv:0801.1725 [hep-lat]]
97. **“Scaling analysis of FLIC fermion actions”**  
W. Kamleh, B. Lasscock, D. B. Leinweber and A. G. Williams  
Phys. Rev. D **77**, 014507 (2008) 6 pp. [arXiv:0709.1531 [hep-lat]]
96. **“Scaling behavior and positivity violation of the gluon propagator in full QCD”**  
P. O. Bowman *et al.*  
Phys. Rev. D **76**, 094505 (2007) 7 pp. [arXiv:hep-lat/0703022]
95. **“Unquenching effects in the quark and gluon propagator”**  
W. Kamleh, P. O. Bowman, D. B. Leinweber, A. G. Williams and J. Zhang  
Phys. Rev. D **76**, 094501 (2007) 9 pp. [arXiv:0705.4129 [hep-lat]]
94. **“Even parity excitations of the nucleon in lattice QCD”**  
B. G. Lasscock, J. N. Hedditch, W. Kamleh, D. B. Leinweber, W. Melnitchouk, A. G. Williams and J. M. Zanotti  
Phys. Rev. D **76**, 054510 (2007) 8 pp. [arXiv:0705.0861 [hep-lat]]
93. **“Pseudoscalar and vector meson form factors from lattice QCD”**  
J. N. Hedditch, W. Kamleh, B. G. Lasscock, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
Phys. Rev. D **75**, 094504 (2007) 11 pp. [arXiv:hep-lat/0703014]

92. **“Chiral extrapolation of nucleon magnetic form factors”**  
P. Wang, D. B. Leinweber, A. W. Thomas and R. D. Young  
Phys. Rev. D **75**, 073012 (2007) 10 pp. [arXiv:hep-ph/0701082]
91. **“Quark-gluon vertex in general kinematics”**  
A. Kizilersu, D. B. Leinweber, J. I. Skullerud and A. G. Williams  
Eur. Phys. J. **C50**, 871 (2007) 5 pp. [arXiv:hep-lat/0610078]
90. **“Gluon flux-tube distribution and linear confinement in baryons”**  
F. Bissey, F. G. Cao, A. R. Kitson, A. I. Signal, D. B. Leinweber, B. G. Lasscock and A. G. Williams  
Phys. Rev. D **76**, 114512 (2007) 16 pp. [arXiv:hep-lat/0606016]
89. **“Precision electromagnetic structure of octet baryons in the chiral regime”**  
S. Boinepalli, D. B. Leinweber, A. G. Williams, J. M. Zanotti and J. B. Zhang  
Phys. Rev. **D74**, 093005 (2006) 29 pp. [arXiv:hep-lat/0604022]
88. **“Strange electric form factor of the proton”**  
D. B. Leinweber *et al.*  
Phys. Rev. Lett. **97**, 022001 (2006) 4 pp. [arXiv:hep-lat/0601025]
87. **“Spin glass behavior of the antiferromagnetic Ising model on a scale-free network”**  
M. Bartolozzi, T. Surungan, D. B. Leinweber and A. G. Williams  
Phys. Rev. B **73**, 224419 (2006) 8 pp. [arXiv:cond-mat/0512488]
86. **“Unified chiral analysis of the vector meson spectrum from lattice QCD”**  
W. Armour, C. R. Allton, D. B. Leinweber, A. W. Thomas and R. D. Young  
J. Phys. G: Nucl. Part. Phys. **32**, 971-991 (2006) 21 pp. [arXiv:hep-lat/0510078]
85. **“Scaling behavior of quark propagator in full QCD”**  
M. B. Parappilly, P. O. Bowman, U. M. Heller, D. B. Leinweber, A. G. Williams and J. B. Zhang  
Phys. Rev. D **73**, 054504 (2006) 5 pp. [arXiv:hep-lat/0511007]
84. **“Symbiosis in the Bak-Sneppen Model for biological evolution with Economic Applications”**  
M. Bartolozzi, D. B. Leinweber and A. W. Thomas  
Physica A **365**, 499 (2006) 10 pp. [arXiv:cond-mat/0503421]
83. **“Nonperturbative renormalization of composite operators with overlap fermions”**  
J. B. Zhang *et al.*  
Phys. Rev. D **72**, 114509 (2005) 18 pp. [arXiv:hep-lat/0507022]
82. **“ $1^{-+}$  exotic meson at light quark masses”**  
J. N. Hedditch, W. Kamleh, B. G. Lasscock, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
Phys. Rev. D **72**, 114507 (2005) 8 pp. [arXiv:hep-lat/0509106]
81. **“Spin 3/2 pentaquark resonance signature in lattice QCD”**  
B. G. Lasscock, D. B. Leinweber, W. Melnitchouk, A. W. Thomas, A. G. Williams, R. D. Young and J. M. Zanotti  
Phys. Rev. D **72**, 074507 (2005) 10 pp. [arXiv:hep-lat/0504015]
80. **“Neutron stars and strange stars in the chiral SU(3) quark mean field model”**  
P. Wang, S. Lawley, D. B. Leinweber, A. W. Thomas and A. G. Williams  
Phys. Rev. C **72**, 045801 (2005) 8 pp. [arXiv:nucl-th/0506014]

79. **“Chiral and continuum extrapolation of partially-quenched lattice results”**  
C. R. Allton, W. Armour, D. B. Leinweber, A. W. Thomas and R. D. Young  
Phys. Lett. B **628**, 125 (2005) 6 pp. [arXiv:hep-lat/0504022]
78. **“Stochastic Opinion Formation in Scale-Free Networks”**  
M. Bartolozzi, D. B. Leinweber and A. W. Thomas  
Phys. Rev. E **72**, 046113 (2005) 10 pp. [arXiv:physics/0504168]
77. **“Search for the pentaquark resonance signature in lattice QCD”**  
B. G. Lasscock, D. B. Leinweber, W. Melnitchouk, A. W. Thomas, A. G. Williams, R. D. Young and J. M. Zanotti  
Phys. Rev. D **72**, 014502 (2005) 22 pp. [arXiv:hep-lat/0503008]
76. **“Self-Similar Log-Periodic Structures in Western Stock Markets from 2000”**  
M. Bartolozzi, S. Drozd, D. B. Leinweber, J. Speth and A. W. Thomas  
Int. J. of Mod. Phys. C **16**, 1347 (2005) 15 pp. [arXiv:cond-mat/0501513]
75. **“Fat link irrelevant clover overlap quark propagator”**  
W. Kamleh, P. O. Bowman, D. B. Leinweber, A. G. Williams and J. Zhang  
Phys. Rev. D **71**, 094507 (2005) 11 pp. [arXiv:hep-lat/0412022]
74. **“Precise determination of the strangeness magnetic moment of the nucleon”**  
D. B. Leinweber *et al.*  
Phys. Rev. Lett. **94**, 212001 (2005) 4 pp. [arXiv:hep-lat/0406002]
73. **“Improved chiral properties of FLIC fermions”**  
S. Boinepalli, W. Kamleh, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
Phys. Lett. B **616**, 196 (2005) 8 pp. [arXiv:hep-lat/0405026]
72. **“Unquenched quark propagator in Landau gauge”**  
P. O. Bowman, U. M. Heller, D. B. Leinweber, M. B. Parappilly, A. G. Williams and J. Zhang  
Phys. Rev. D **71**, 054507 (2005) 7 pp. [arXiv:hep-lat/0501019]
71. **“Scaling of FLIC fermions”**  
J. M. Zanotti, B. Lasscock, D. B. Leinweber and A. G. Williams  
Phys. Rev. D **71**, 034510 (2005) 5 pp. [arXiv:hep-lat/0405015]
70. **“Quark propagator in Landau and Laplacian gauges with overlap fermions”**  
J. B. Zhang, P. O. Bowman, R. J. Coad, U. M. Heller, D. B. Leinweber and A. G. Williams  
Phys. Rev. D **71**, 014501 (2005) 8 pp. [arXiv:hep-lat/0410045]
69. **“Leading quenching effects in the proton magnetic moment”**  
R. D. Young, D. B. Leinweber and A. W. Thomas  
Phys. Rev. D **71**, 014001 (2005) 9 pp. [arXiv:hep-lat/0406001]
68. **“Self-Organized Criticality and Stock Market Dynamics: an Empirical Study”**  
M. Bartolozzi, D. B. Leinweber and A. W. Thomas  
Physica A **350**, 451 (2005) 15 pp. [arXiv:cond-mat/0405257]
67. **“Liquid-gas phase transition in nuclear matter including strangeness”**  
P. Wang, D. B. Leinweber, A. W. Thomas and A. G. Williams  
Phys. Rev. C **70**, 055204 (2004) 8 pp. [arXiv:nucl-th/0407056]
66. **“Liquid-gas phase transition and Coulomb instability of asymmetric nuclear systems”**  
P. Wang, D. B. Leinweber, A. W. Thomas and A. G. Williams  
Nucl. Phys. A **748**, 226 (2005) 15 pp. [arXiv:nucl-th/0407057]

65. **“New treatment of the chiral SU(3) quark mean field model”**  
P. Wang, D. B. Leinweber, A. W. Thomas and A. G. Williams  
Nucl. Phys. A **744**, 273 (2004) 20 pp. [arXiv:nucl-th/0404079]
64. **“Hybrid Monte Carlo with fat link fermion actions”**  
W. Kamleh, D. B. Leinweber and A. G. Williams  
Phys. Rev. D **70**, 014502 (2004) 9 pp. [arXiv:hep-lat/0403019]
63. **“Limits on the temporal variation of the fine structure constant, quark masses and strong interaction from quasar absorption spectra and atomic clock experiments”**  
V. V. Flambaum, D. B. Leinweber, A. W. Thomas and R. D. Young  
Phys. Rev. D **69**, 115006 (2004) 8 pp. [arXiv:hep-ph/0402098]
62. **“Unquenched gluon propagator in Landau gauge”**  
P. O. Bowman, U. M. Heller, D. B. Leinweber, M. B. Parappilly and A. G. Williams  
Phys. Rev. D **70**, 034509 (2004) 4 pp. [arXiv:hep-lat/0402032]
61. **“Topological charge evolution in the Markov-chain of QCD”**  
D. B. Leinweber, A. G. Williams, J. b. Zhang and F. X. Lee  
Phys. Lett. B **585**, 187 (2004) 5 pp. [arXiv:hep-lat/0312035]
60. **“The Hamiltonian limit of (3+1)D SU(3) lattice gauge theory on anisotropic lattices”**  
T. M. R. Byrnes, M. Loan, C. J. Hamer, F. D. R. Bonnet, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
Phys. Rev. D **69**, 074509 (2004) 10 pp. [arXiv:hep-lat/0311014]
59. **“Comparison of  $|\mathbf{Q}| = 1$  and  $|\mathbf{Q}| = 2$  gauge-field configurations on the lattice four-torus”**  
S. O. Bilson-Thompson, D. B. Leinweber, A. G. Williams and G. V. Dunne  
Annals Phys. **311**, 267 (2004) 21 pp. [arXiv:hep-lat/0306010]
58. **“Physical nucleon properties from lattice QCD”**  
D. B. Leinweber, A. W. Thomas and R. D. Young  
Phys. Rev. Lett. **92**, 242002 (2004) 4 pp. [arXiv:hep-lat/0302020]
57. **“Scaling behavior of the overlap quark propagator in Landau gauge”**  
J. B. Zhang, P. O. Bowman, D. B. Leinweber, A. G. Williams and F. D. R. Bonnet  
Phys. Rev. D **70**, 034505 (2004) 6 pp. [arXiv:hep-lat/0301018]
56. **“Quark Contributions to Baryon Magnetic Moments in Full, Quenched and Partially Quenched QCD”**  
D. B. Leinweber  
Phys. Rev. D **69**, 014005 (2004) 22 pp. [arXiv:hep-lat/0211017]
55. **“Spin-3/2 Nucleon and Delta Baryons in Lattice QCD”**  
J. M. Zanotti, D. B. Leinweber, A. G. Williams, J. B. Zhang, W. Melnitchouk and S. Choe  
Phys. Rev. D **68**, 054506 (2003) 8 pp. [arXiv:hep-lat/0304001]
54. **“Nonperturbative Structure of the Quark Gluon Vertex”**  
J. I. Skullerud, P. O. Bowman, A. Kizilersu, D. B. Leinweber and A. G. Williams  
JHEP **0304**, 047 (2003) 16 pp. [arXiv:hep-ph/0303176]
53. **“Delta Baryon Magnetic Moments from Lattice QCD”**  
I. C. Cloet, D. B. Leinweber and A. W. Thomas  
Phys. Lett. B **563**, 157 (2003) 8 pp. [arXiv:hep-lat/0302008]

52. **“Convergence of Chiral Effective Field Theory”**  
R. D. Young, D. B. Leinweber and A. W. Thomas  
Prog. Part. Nucl. Phys. **50** 399-417 (2003) 19 pp. [arXiv:hep-lat/0212031]
51. **“Gluon Propagator on Coarse Lattices in Laplacian Gauges”**  
P. O. Bowman, U. M. Heller, D. B. Leinweber and A. G. Williams  
Phys. Rev. D **66**, 074505 (2002) 8 pp. [arXiv:hep-lat/0206010]
50. **“Chiral Analysis of Quenched Baryon Masses”**  
R. D. Young, D. B. Leinweber, A. W. Thomas and S. V. Wright  
Phys. Rev. D **66**, 094507 (2002) 10 pp. [arXiv:hep-lat/0205017]
49. **“Simple Quark Model with Chiral Phenomenology”**  
I. C. Cloet, D. B. Leinweber and A. W. Thomas  
Phys. Rev. C **65**, 062201 (2002) 4 pp. [arXiv:hep-ph/0203023]
48. **“Highly-Improved Lattice Field-Strength Tensor”**  
S. O. Bilson-Thompson, D. B. Leinweber and A. G. Williams  
Annals Phys. **304**, 1 (2003) 21 pp. [arXiv:hep-lat/0203008]
47. **“Excited Baryons in Lattice QCD”**  
W. Melnitchouk, J. N. Hedditch, D. B. Leinweber, A. G. Williams, J. M. Zanotti and J. B. Zhang  
[CSSM Lattice collaboration]  
Phys. Rev. D **67**, 114506 (2003) 17 pp. [arXiv:hep-lat/0202022]
46. **“Overlap Quark Propagator in Landau Gauge”**  
F. D. Bonnet, P. O. Bowman, D. B. Leinweber, A. G. Williams and J. b. Zhang [CSSM Lattice collaboration]  
Phys. Rev. D **65**, 114503 (2002) 13 pp. [arXiv:hep-lat/0202003]
45. **“Accelerated Overlap Fermions”**  
W. Kamleh, D. H. Adams, D. B. Leinweber and A. G. Williams  
Phys. Rev. D **66**, 014501 (2002) 9 pp. [arXiv:hep-lat/0112041]
44. **“Low-Lying Eigenmodes of the Wilson-Dirac Operator and Correlations with Topological Objects”**  
D. J. Kusterer, J. Hedditch, W. Kamleh, D. B. Leinweber and A. G. Williams  
Nucl. Phys. B **628**, 253 (2002) 5 pp. [arXiv:hep-lat/0111029]
43. **“Numerical Study of Lattice Index Theorem using Improved Cooling and Overlap Fermions”**  
J. B. Zhang, S. O. Bilson-Thompson, F. D. Bonnet, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
Phys. Rev. D **65**, 074510 (2002) 7 pp. [arXiv:hep-lat/0111060]
42. **“Hadron Masses from Novel Fat-Link Fermion Actions”**  
J. M. Zanotti, S. Bilson-Thompson, F. D. R. Bonnet, P. D. Coddington, D. B. Leinweber, A. G. Williams, J. B. Zhang, W. Melnitchouk, and F. X. Lee [CSSM Lattice Collaboration]  
Phys. Rev. D **65**, 074507 (2002) 6 pp. [arXiv:hep-lat/0110216]
41. **“Chiral Behaviour of the Rho Meson in Lattice QCD”**  
D. B. Leinweber, A. W. Thomas, K. Tsushima and S. V. Wright.  
Phys. Rev. **D64**, 094502, 1–8 (2001) 8 pp. [arXiv:hep-lat/0104013]
40. **“Improved Smoothing Algorithms for Lattice Gauge Theory”**  
F. D. Bonnet, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
Phys. Rev. D **65**, 114510 (2002) 19 pp. [arXiv:hep-lat/0106023]

39. **“Nonperturbative Improvement and Tree-Level Correction of the Quark Propagator”**  
J. Skullerud, D. B. Leinweber and A. G. Williams  
Phys. Rev. D **64**, 074508 (2001) 9 pp. [arXiv:hep-lat/0102013]
38. **“Infinite Volume and Continuum Limits of the Landau-Gauge Gluon Propagator”**  
F. D. Bonnet, P. O. Bowman, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
Phys. Rev. **D64**, 034501, 1–10 (2001) 10 pp. [arXiv:hep-lat/0101013]
37. **“Chiral Symmetry and the Intrinsic Structure of the Nucleon”**  
D. B. Leinweber, A. W. Thomas and R. D. Young.  
Phys. Rev. Lett. **86**, 5011 (2001) 4 pp. [arXiv:hep-ph/0101211]
36. **“General Algorithm for Improved Lattice Actions on Parallel Computing Architectures”**  
F. D. Bonnet, D. B. Leinweber and A. G. Williams.  
J. of Comp. Phys. **170**, 1 (2001) 17 pp. [arXiv:hep-lat/0001017]
35. **“Incorporating Chiral Symmetry and Heavy Quark Theory in Extrapolations of Octet Baryon Charge Radii”**  
E. J. Hackett-Jones, D. B. Leinweber and A. W. Thomas.  
Phys. Lett. **B494**, 89 (2000) 11 pp. [arXiv:hep-lat/0008018]
34. **“Incorporating Chiral Symmetry in Extrapolations of Octet Baryon Magnetic Moments”**  
E. J. Hackett-Jones, D. B. Leinweber and A. W. Thomas.  
Phys. Lett. **B489**, 143 (2000) 5 pp. [arXiv:hep-lat/0004006]
33. **“Infrared Behavior of the Gluon Propagator on a Large Volume Lattice”**  
F. D. Bonnet, P. O. Bowman, D. B. Leinweber and A. G. Williams.  
Phys. Rev. **D62**, 051501 (2000) 4 pp. [arXiv:hep-lat/0002020]
32. **“Lattice QCD Calculations of the Sigma Commutator”**  
D. B. Leinweber, A. W. Thomas and S. V. Wright.  
Phys. Lett. **B482**, 109 (2000) 5 pp. [arXiv:hep-lat/0001007]
31. **“Calibration of Smearing and Cooling Algorithms in SU(3)-Color Gauge Theory”**  
F. D. Bonnet, P. Fitzhenry, D. B. Leinweber, M. R. Stanford and A. G. Williams.  
Phys. Rev. D **62**, 094509 (2000) 12 pp. [arXiv:hep-lat/0001018]
30. **“Lattice QCD Analysis of the Strangeness Magnetic Moment of the Nucleon”**  
D. B. Leinweber and A. W. Thomas.  
Phys. Rev. **D62**, 074505 (2000) 10 pp. [arXiv:hep-lat/9912052]
29. **“Baryon Masses from Lattice QCD: Beyond the Perturbative Chiral Regime”**  
D.B. Leinweber, A.W. Thomas, K. Tsushima and S.V. Wright.  
Phys. Rev. **D61**, 074502 (2000) 10 pp. [arXiv:hep-lat/9906027]
28. **“Discretization Errors in Landau Gauge on the Lattice”**  
F.D. Bonnet, P.O. Bowman, D.B. Leinweber, A.G. Williams and D.G. Richards.  
Austral. J. Phys. **52**, 939–948 (1999) 10 pp. [arXiv:hep-lat/9905006]
27. **“Asymptotic Scaling and Infrared Behavior of the Gluon Propagator”**  
D.B. Leinweber, J.I. Skullerud, A.G. Williams and C. Parrinello,  
[UKQCD Collaboration]  
Phys. Rev. **D60**, 094507 (1999) 17 pp. [arXiv:hep-lat/9811027]  
Erratum *ibid.* **D61**, 079901 (2000).

26. **“Nucleon magnetic moments beyond the perturbative chiral regime”**  
D. B. Leinweber, D. H. Lu and A. W. Thomas  
Phys. Rev. D **60**, 034014 (1999) 6 pp. [arXiv:hep-lat/9810005]
25. **“Valence QCD: Connecting QCD to the Quark Model”**  
K.F. Liu, S.J. Dong, T. Draper, D.B. Leinweber, J. Sloan, W. Wilcox, R.M. Woloshyn.  
Phys. Rev. **D59**, 112001 (1999) 26 pp. [arXiv:hep-ph/9806491]
24. **“Light Hadron Spectroscopy on Coarse Lattices with  $\mathcal{O}(a^2)$  Mean-Field Improved Actions”**  
F. X. Lee and D. B. Leinweber.  
Phys. Rev. **D59**, 074504 (1999) 10 pp. [arXiv:hep-lat/9711044]
23. **“Gluon Propagator in the Infrared Region”**  
D. B. Leinweber, J. I. Skullerud, A. G. Williams, and C. Parrinello.  
Phys. Rev. **D58**, 031501 (1998) 5 pp. [arXiv:hep-lat/9803015]
22. **“New QCD Sum Rules for Nucleon Axial Vector Coupling Constants”**  
Frank X. Lee, Derek B. Leinweber and Xuemin Jin.  
Phys. Rev. **D55**, 4066 (1997) 17 pp. [arXiv:nucl-th/9611011]
21. **“QCD Sum Rules for Skeptics”**  
Derek B. Leinweber  
Annals Phys. **254**, 328 (1997) 69 pp. [arXiv:nucl-th/9510051]
20. **“Background-Field Formalism in Nonperturbative QCD”**  
Matthias Burkardt, Xuemin Jin, and Derek B. Leinweber.  
Phys. Lett. **B385**, 52 (1996) 5 pp. [arXiv:hep-ph/9604450]
19. **“QCD Equalities for Baryon Current Matrix Elements”**  
Derek B. Leinweber  
Phys. Rev. **D53**, 5115 (1996) 10 pp. [arXiv:hep-ph/9512319]
18. **“New QCD Sum Rules for Nucleons in Nuclear Matter”**  
R. J. Furnstahl, Xuemin Jin, and Derek B. Leinweber.  
Phys. Lett. **B387**, 253 (1996) 6 pp. [arXiv:nucl-th/9511007]
17. **“ $\rho - \omega$  Mixing via QCD Sum Rules with Finite Mesonic Widths”**  
M.J. Iqbal, Xuemin Jin and Derek B. Leinweber.  
Phys. Lett. **B386**, 55 (1996) 7 pp. [arXiv:nucl-th/9507026]
16. **“Mesonic Width Effects on the Momentum Dependence of the  $\rho - \omega$  Mixing Matrix Element”**  
M.J. Iqbal, Xuemin Jin and Derek B. Leinweber.  
Phys. Lett. **B367**, 45 (1996) 5 pp. [arXiv:nucl-th/9504026]
15. **“Valid QCD Sum Rules for Vector Mesons in Nuclear Matter”**  
Xuemin Jin and Derek B. Leinweber.  
Phys. Rev. **C52**, 3344 (1995) 9 pp. [arXiv:nucl-th/9510064]
14. **“Nucleon Properties from Unconventional Interpolating Fields”**  
Derek B. Leinweber  
Phys. Rev. **D51**, 6383 (1995) 11 pp. [arXiv:nucl-th/9406001]
13. **“Testing QCD Sum Rule Techniques on the Lattice”**  
Derek B. Leinweber  
Phys. Rev. **D51**, 6369 (1995) 14 pp. [arXiv:nucl-th/9405002]

12. **“Unquenching the  $\rho$  Meson”**  
Derek B. Leinweber and Thomas D. Cohen.  
Phys. Rev. **D49**, 3512 (1994) 7 pp. [arXiv:hep-ph/9307261]
11. **“Baryon Octet to Decuplet Electromagnetic Transitions”**  
Derek B. Leinweber, Terrence Draper and R.M. Woloshyn.  
Phys. Rev. **D48**, 2230 (1993) 20 pp. [arXiv:hep-lat/9212016]
10. **“Do Quarks Really Form Diquark Clusters in the Nucleon?”**  
Derek B. Leinweber  
Phys. Rev. **D47**, 5096 (1993) 8 pp. [arXiv:hep-ph/9302266]
9. **“The Pion Cloud in Quenched QCD”**  
Thomas D. Cohen and Derek B. Leinweber.  
Comments Nucl. Part. Phys. **21**, 137 (1993) 14 pp. [arXiv:hep-ph/9212225]
8. **“Chiral Corrections to Lattice Calculations of Charge Radii”**  
Derek B. Leinweber and Thomas D. Cohen.  
Phys. Rev. **D47**, 2147 (1993) 4 pp. [arXiv:hep-lat/9211058]
7. **“Decuplet Baryon Structure from Lattice QCD”**  
Derek B. Leinweber, Terrence Draper and R.M. Woloshyn.  
Phys. Rev. **D46**, 3067 (1992) 19 pp. [arXiv:hep-lat/9208025]
6. **“Lattice QCD Evaluation of Baryon Magnetic Moment Sum Rules”**  
Derek B. Leinweber  
Phys. Rev. **D45**, 252 (1992) 7 pp.
5. **“Electromagnetic Structure of Octet Baryons”**  
Derek B. Leinweber, R.M. Woloshyn and Terrence Draper.  
Phys. Rev. **D43**, 1659 (1991) 20 pp.
4. **“Electromagnetic Form Factors of Spin-3/2 Baryons”**  
S. Nozawa and Derek B. Leinweber.  
Phys. Rev. **D42**, 3567 (1990) 5 pp.
3. **“QCD Sum Rule Analysis of Spin-Orbit Splitting in Baryons”**  
Derek B. Leinweber  
Annals Phys. **198**, 203 (1990) 49 pp.
2. **“Momentum Dependent Effects in the Decays of Charmonium and Upsilon”**  
Derek B. Leinweber  
Nucl. Phys. **A470**, 477 (1987) 11 pp.
1. **“Vector Meson Decay and the Pion-Quark Coupling Constant”**  
Derek B. Leinweber  
Nucl. Phys. **A457**, 529 (1986) 12 pp.

## **Publications – Refereed Conference Proceedings**

99. **“Di-Quarks and Tri-Quarks on the Lattice”**  
A. I. Signal, F. R. P. Bissey and D. B. Leinweber  
arXiv:0806.0644 [hep-lat] 7 pp.  
*To appear in the proceedings of QCD Downunder II, Massey University, Albany, New Zealand  
17 - 19 January 2008*

98. **“Buried treasure in the sand of the QCD vacuum”**  
 P. J. Moran and D. B. Leinweber  
 arXiv:0805.4246 [hep-lat] 7 pp.  
*To appear in the proceedings of QCD Downunder II, Massey University, Albany, New Zealand  
 17 - 19 January 2008*
97. **“Centre Vortices in SU(3)”**  
 A. O. Cais, W. Kamleh, B. Lasscock, D. Leinweber, L. von Smekal and K. Langfeld  
 PoS **LATTICE 2007**, 321 (2007) 7 pp.  
 [arXiv:0710.2958 [hep-lat]]
96. **“Comparing SU(2) to SU(3) gluodynamics on large lattices”**  
 A. Sternbeck, L. von Smekal, D. B. Leinweber and A. G. Williams  
 PoS **LATTICE 2007**, 340 (2007) 7 pp.  
 [arXiv:0710.1982 [hep-lat]]
95. **“Aspects of QCD Vacuum Structure”**  
 P. J. Moran and D. B. Leinweber  
 PoS **LATTICE 2007**, 383 (2007) 7 pp.  
 [arXiv:0710.2380 [hep-lat]]
94. **“Some Recent Lattice QCD Results From The CSSM”**  
 S. Boinepalli *et al.*  
 Int. J. Mod. Phys. A **22**, 5053 (2007) 9 pp.  
*Prepared for Festschrift in Honour of Bruce McKellar and Girish Joshi, Melbourne, Australia,  
 29-30 Nov 2006*
93. **“Exotic Hadrons On The Lattice”**  
 B. G. Lasscock, D. B. Leinweber and A. G. Williams  
 Prog. Theor. Phys. Suppl. **168**, 36 (2007) 9 pp.  
*Prepared for YKIS Seminar on New Frontiers in QCD: Exotic Hadrons and Hadronic Matter,  
 Kyoto, Japan, 20 Nov - 8 Dec 2006*
92. **“Vector meson electromagnetic form factors”**  
 B. G. Lasscock, J. N. Hedditch, D. B. Leinweber and A. G. Williams  
 PoS **LAT2006**, 114 (2006) 7 pp.  
 [arXiv:hep-lat/0611029]  
*Prepared for 24th International Symposium on Lattice Field Field: Lattice 2006, Tucson,  
 Arizona, USA, July 23–28 2006. 2005*
91. **“Light quark electromagnetic structure of baryons”**  
 S. Boinepalli, J. N. Hedditch, B. G. Lasscock, D. B. Leinweber, A. G. Williams, J. M. Zanotti  
 and J. B. Zhang  
 PoS **LAT2006** (2006) 7 pp.  
 [arXiv:hep-lat/0611028]  
*Prepared for 24th International Symposium on Lattice Field Field: Lattice 2006, Tucson,  
 Arizona, USA, July 23–28 2006. 2005*
90. **“Effects of dynamical FLIC fermions in the quark and gluon propagator”**  
 Waseem Kamleh, Patrick O. Bowman, Derek B. Leinweber, Anthony G. Williams and Jianbo  
 Zhang  
 Nucl. Phys. B (Proc. Supp.) **161**, 109 (2006) 7 pp.  
*Prepared for the joint CSSM, NITP and International Light Cone Advisory Committee (IL-  
 CAC) Workshop, Cairns, Australia, 7–15 July 2005.*

89. **“Role of centre vortices in dynamical mass generation”**  
 Derek B. Leinweber, Patrick O. Bowman, Urs M. Heller, Daniel-Jens Kusterer, Kurt Langfeld and Anthony G. Williams  
 Nucl. Phys. B (Proc. Supp.) **161**, 130 (2006) 6 pp.  
*Prepared for the joint CSSM, NITP and International Light Cone Advisory Committee (IL-CAC) Workshop, Cairns, Australia, 7–15 July 2005.*
88. **“QCD Propagators: Some Results from the Lattice”**  
 Patrick O. Bowman, Urs M. Heller, Derek B. Leinweber, Maria B. Parappilly and Anthony G. Williams  
 Nucl. Phys. B (Proc. Supp.) **161**, 27 (2006) 7 pp.  
*Prepared for the joint CSSM, NITP and International Light Cone Advisory Committee (IL-CAC) Workshop, Cairns, Australia, 7–15 July 2005.*
87. **“Some Recent Research Highlights From The CSM”**  
 B. G. Lasscock, J. Hedditch, M. B. Parappilly, D. B. Leinweber and A. G. Williams  
 Nucl. Phys. Proc. Suppl. **161**, 248 (2006) 8 pp.  
*Prepared for the joint CSSM, NITP and International Light Cone Advisory Committee (IL-CAC) Workshop, Cairns, Australia, 7–15 July 2005.*
86. **“Effects of dynamical sea-quarks on quark and gluon propagators”**  
 M. B. Parappilly, P. O. Bowman, U. M. Heller, D. B. Leinweber, A. G. Williams and J. B. Zhang  
 AIP Conf. Proc. **842**, 237 (2006) 3 pp.  
 [arXiv:hep-lat/0601010]  
*In the proceedings of Particles and Nuclei International Conference (PANIC05), Santa Fe, NM, USA, 24-28 October 2005.*
85. **“Scale-free avalanche dynamics in the stockmarket”**  
 M. Bartolozzi, D. B. Leinweber, A. W. Thomas  
 Physica A **370**, 132 (2006) 8 pp. [arXiv:physics/0601171]  
*In the proceedings of the Econophysics Colloquium, Australian National University, Canberra, Australia, 14-18 November 2005.*
84. **“Lattice QCD Studies of Pentaquarks and Exotics”**  
 B. G. Lasscock, J. Hedditch, W. Kamleh, D. B. Leinweber, W. Melnitchouk, A. W. Thomas, A. G. Williams, R. D. Young and J. M. Zanotti  
 Nucl. Phys. Proc. Suppl. **153**, 348 (2006) 6 pp.  
*Talk given at Workshop on Computational Hadron Physics (Hadron Physics 13), Nicosia, Cyprus, 14-17 Sep 2005*
83. **“Scale-free networks in complex systems”**  
 M. Bartolozzi, D.B. Leinweber, T. Surungan, A.W. Thomas and A.G. Williams  
 Proceedings of SPIE, **6039**, 249 (2005) 9 pp. [arXiv:cond-mat/0511273]  
*In the proceedings of the SPIE International Symposium on Microelectronics, MEMS, and Nanotechnology, University of Brisbane, Brisbane, Australia, 11-15 December 2005.*
82. **“Spin-3/2 pentaquark resonance signature”**  
 B. G. Lasscock, D. B. Leinweber, A. G. Williams, W. Kamleh, W. Melnitchouk, A. W. Thomas, R. D. Young and J. M. Zanotti  
 PoS **LAT2005**, 067 (2005) 6 pp.  
*Prepared for 23rd International Symposium on Lattice Field Theory: Lattice 2005, Trinity College, Dublin, Ireland, 25-30 Jul 2005*

81. **“Light-quark FLIC fermion simulations of the 1++ exotic meson”**  
 J. N. Hedditch, B. G. Lasscock, D. B. Leinweber, A. G. Williams, W. Kamleh and J. M. Zanotti  
 PoS **LAT2005**, 040 (2005) 6 pp. [arXiv:hep-lat/0510103]  
*Talk given at 23rd International Symposium on Lattice Field Theory: Lattice 2005, Trinity College, Dublin, Ireland, 25-30 Jul 2005*
80. **“Chiral and continuum extrapolation of partially-quenched hadron masses”**  
 C. R. Allton, W. Armour, D. B. Leinweber, A. W. Thomas and R. D. Young  
 PoS **LAT2005**, 049 (2005) 6 pp. [arXiv:hep-lat/0511004]  
*Contributed to 23rd International Symposium on Lattice Field Theory: Lattice 2005, Trinity College, Dublin, Ireland, 25-30 Jul 2005*
79. **“Power counting regime of chiral extrapolation and beyond”**  
 D. B. Leinweber, A. W. Thomas and R. D. Young  
 PoS **LAT2005**, 048 (2005) 6 pp. [arXiv:hep-lat/0510070]  
*Contributed to 23rd International Symposium on Lattice Field Theory: Lattice 2005, Trinity College, Dublin, Ireland, 25-30 Jul 2005*
78. **“Scaling of nonperturbative renormalization of composite operators with overlap fermions”**  
 J. B. Zhang, D. B. Leinweber and A. G. Williams  
 Int. J. Mod. Phys. A (2005) 4 pp. [arXiv:hep-lat/0509050]  
*Talk given at International Conference on QCD and Hadronic Physics, Beijing, China, 16-20 June 2005*
77. **“Finite volume dependence of hadron properties and lattice QCD”**  
 A. W. Thomas, J. D. Ashley, D. B. Leinweber and R. D. Young  
 J. Phys. Conf. Ser. **9**, 321 (2005) 10 pp. [arXiv:hep-lat/0502002]  
*Invited talk at 1st Meeting of the APS Topical Group on Hadronic Physics (GHP2004), Batavia, Illinois, 24-26 Oct 2004*
76. **“Extrapolation of lattice QCD results beyond the power-counting regime”**  
 D. B. Leinweber, A. W. Thomas and R. D. Young  
 Nucl. Phys. A **755**, 59 (2005) 12 pp.  
 [arXiv:hep-lat/0501028]  
*Presented at Baryons '04, International Conference on the Structure of Baryons, Ecole Polytechnique, Palaiseau, France, October 25-29, 2004*
75. **“Systematic uncertainties in the precise determination of the strangeness magnetic moment of the nucleon”**  
 D. B. Leinweber, S. Boinepalli, A. W. Thomas, A. G. Williams, R. D. Young, J. B. Zhang and J. M. Zanotti  
 Eur. Phys. J. A **24S2**, 79 (2005) 7 pp. [arXiv:hep-lat/0502004]  
*Invited talk at International Workshop on Parity Violation and Hadronic Structure (PAVI04), Grenoble, France, 8-11 June 2004*
74. **“Towards a connection between nuclear structure and QCD”**  
 A. W. Thomas, P. A. M. Guichon, D. B. Leinweber and R. D. Young  
 Prog. Theor. Phys. Suppl. **156**, 124 (2004) 13 pp. [arXiv:nucl-th/0411014]  
*Lectures given at 18th Nishinomiya-Yukawa Memorial Symposium on Strangeness in Nuclear Matter, Nishinomiya, Japan, 4-5 Dec 2003*
73. **“The Hamiltonian Limit Of (3+1)D SU(3) Lattice Gauge Theory”**  
 T. M. R. Byrnes, M. Loan, C. J. Hamer, F. D. R. Bonnet, D. B. Leinweber, A. G. Williams

and J. M. Zanotti

Nucl. Phys. Proc. Suppl. **141**, 253 (2005) 6 pp.

*Prepared for Workshop on QCD Down Under, Barossa Valley and Adelaide, Australia, 10-19 Mar 2004*

72. **“Quark-gluon vertex in arbitrary kinematics”**

J. I. Skullerud, P. O. Bowman, A. Kizilersu, D. B. Leinweber and A. G. Williams

Nucl. Phys. B (Proc. Suppl.) **141**, 244 (2005) 6 pp. [arXiv:hep-lat/0408032]

*Talk presented at QCD Down Under, Barossa Valley and Adelaide, Australia, 10-19 Mar 2004*

71. **“Chiral SU(3) quark mean-field model for hadronic systems”**

P. Wang, D. B. Leinweber, A. W. Thomas and A. G. Williams

Nucl. Phys. B (Proc. Suppl.) **141**, 273 (2005) 6 pp.

*Talk presented at QCD Down Under, Barossa Valley and Adelaide, Australia, 10-19 Mar 2004*

70. **“Finite-range regularisation and chiral extrapolation”**

R. D. Young, D. B. Leinweber and A. W. Thomas

Nucl. Phys. B (Proc. Suppl.) **141**, 233 (2005) 5 pp.

*Talk presented at QCD Down Under, Barossa Valley and Adelaide, Australia, 10-19 Mar 2004*

69. **“Overlap quark propagator in Landau and Laplacian gauges”**

J. B. Zhang, P. O. Bowman, R. J. Coad, U. M. Heller, D. B. Leinweber and A. G. Williams

Nucl. Phys. B (Proc. Suppl.) **141**, 15 (2005) 7 pp.

*Talk presented at QCD Down Under, Barossa Valley and Adelaide, Australia, 10-19 Mar 2004*

68. **“Properties of the FLIC Overlap Quark Propagator”**

W. Kamleh, P. O. Bowman, D. B. Leinweber, A. G. Williams and J. B. Zhang

Nucl. Phys. B (Proc. Suppl.) **141**, 217 (2005) 6 pp.

*Talk presented at QCD Down Under, Barossa Valley and Adelaide, Australia, 10-19 Mar 2004*

67. **“FLIC Mesons: Hybrids and Exotics”**

J. N. Hedditch, B. G. Lasscock, D. B. Leinweber, A. G. Williams and J. M. Zanotti

Nucl. Phys. B (Proc. Suppl.) **141**, 43 (2005) 4 pp.

*Talk presented at QCD Down Under, Barossa Valley and Adelaide, Australia, 10-19 Mar 2004*

66. **“Gluon field distribution in baryons”**

F. Bissey, F-G. Cao, A. Kitson, B. G. Lasscock, D. B. Leinweber, A. I. Signal, A. G. Williams and J. M. Zanotti

Nucl. Phys. B (Proc. Suppl.) **141**, 22 (2005) 4 pp. [arXiv:hep-lat/0501004]

*Talk presented at QCD Down Under, Barossa Valley and Adelaide, Australia, 10-19 Mar 2004*

65. **“Systematic uncertainties in the precise determination of the strangeness magnetic moment of the nucleon”**

D. B. Leinweber, S. Boinepalli, A. W. Thomas, A. G. Williams, R. D. Young, J. B. Zhang and J. M. Zanotti

Nucl. Phys. Proc. Suppl. **141**, 287 (2005) 7 pp.

*Talk presented at QCD Down Under, Barossa Valley and Adelaide, Australia, 10-19 Mar 2004*

64. **“Infrared and ultraviolet properties of the Landau gauge quark propagator”**  
 P. O. Bowman, U. M. Heller, D. B. Leinweber, A. G. Williams and J. b. Zhang  
 Nucl. Phys. Proc. Suppl. **128**, 23 (2004) 7 pp. [arXiv:hep-lat/0403002]  
*Contributed to 2nd Cairns Topical Workshop on Lattice Hadron Physics 2003 (LHP 2003), Cairns, Australia, 22-30 Jul 2003*
63. **“Dynamical fat link fermions”**  
 W. Kamleh, D. B. Leinweber and A. G. Williams  
 Nucl. Phys. Proc. Suppl. **128**, 96 (2004) 4 pp. [arXiv:hep-lat/0402036]  
*Contributed to the proceedings of 2nd Cairns Topical Workshop on Lattice Hadron Physics 2003 (LHP 2003), Cairns, Australia, 22-30 Jul 2003*
62. **“Electromagnetic form factors with FLIC fermions”**  
 J. M. Zanotti, S. Boinepalli, D. B. Leinweber, A. G. Williams and J. B. Zhang  
 Nucl. Phys. Proc. Suppl. **128**, 233 (2004) 7 pp. [arXiv:hep-lat/0401029]  
*Presented at 2nd Cairns Topical Workshop on Lattice Hadron Physics 2003 (LHP 2003), Cairns, Australia, 22-30 Jul 2003*
61. **“Looking inside the quark-gluon vertex”**  
 J. I. Skullerud, A. Kizilersu, P. O. Bowman, D. B. Leinweber and A. G. Williams  
 Nucl. Phys. Proc. Suppl. **128**, 117 (2004) 8 pp.  
*Prepared for 2nd Cairns Topical Workshop on Lattice Hadron Physics 2003 (LHP 2003), Cairns, Australia, 22-30 Jul 2003*
60. **“Hybrid Meson Spectrum from the FLIC action”**  
 J. N. Hedditch, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
 Nucl. Phys. Proc. Suppl. **128**, 221 (2004) 6 pp. [arXiv:hep-lat/0402016]  
*Talk given at 2nd Cairns Topical Workshop on Lattice Hadron Physics 2003 (LHP 2003), Cairns, Australia, 22-30 Jul 2003*
59. **“Strangeness Magnetic Moment of the Nucleon from FLIC Fermions”**  
 D. B. Leinweber, S. Boinepalli, A. W. Thomas, A. G. Williams, R. D. Young, J. M. Zanotti, J. B. Zhang  
 Nucl. Phys. Proc. Suppl. **128**, 132-140 (2004) 9 pp. [arXiv:hep-lat/0406003]  
*Preliminary analysis presented at the 2nd Cairns Topical Workshop on Lattice Hadron Physics 2003 (LHP 2003), Cairns, Australia, 22-30 Jul 2003*
58. **“Nonperturbative renormalisation of composite operators with overlap quarks”**  
 J. B. Zhang, D. B. Leinweber, K. F. Liu and A. G. Williams [CSSM Lattice collaboration]  
 Nucl. Phys. Proc. Suppl. **128**, 240 (2004) 8 pp. [arXiv:hep-lat/0311030]  
*Talk given at 2nd Cairns Topical Workshop on Lattice Hadron Physics 2003 (LHP 2003), Cairns, Australia, 22-30 Jul 2003*
57. **“Chiral extrapolation and physical insights”**  
 R. D. Young, D. B. Leinweber and A. W. Thomas  
 Nucl. Phys. Proc. Suppl. **128**, 227 (2004) 6 pp. [arXiv:hep-lat/0311038]  
*Presented at 2nd Cairns Topical Workshop on Lattice Hadron Physics 2003 (LHP 2003), Cairns, Australia, 22-30 Jul 2003*
56. **“Hybrid and Exotic Mesons from FLIC Fermions”**  
 J. N. Hedditch, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
 Nucl. Phys. Proc. Suppl. **129**, 248 (2004) 3 pp. [arXiv:hep-lat/0309119]  
*Presented at the 21st International Symposium on Lattice Field Theory (LATTICE 2003), Tsukuba, Ibaraki, Japan, 15-19 Jul 2003*

55. **“Physical Baryon Resonance Spectroscopy from Lattice QCD”**  
 D. Morel, B. Crouch, D. B. Leinweber and A. W. Thomas  
 Nucl. Phys. A **737** (2004) 3 pp. [arXiv:nucl-th/0309044]  
*Contributed to 17th International IUPAP Conference on Few-Body Problems in Physics (FB 17), Durham, North Carolina, 5-10 Jun 2003*
54. **“Dynamical FLIC Fermions”**  
 W. Kamleh, D. B. Leinweber and A. G. Williams  
 Nucl. Phys. Proc. Suppl. **129**, 826 (2004) 3 pp. [arXiv:hep-lat/0309154]  
*Presented at the 21st International Symposium on Lattice Field Theory (LATTICE 2003), Tsukuba, Ibaraki, Japan, 15-19 Jul 2003*
53. **“Electromagnetic Form Factors with FLIC Fermions”**  
 J. M. Zanotti, D. B. Leinweber, A. G. Williams and J. B. Zhang  
 Nucl. Phys. Proc. Suppl. **129**, 287 (2004) 3 pp. [arXiv:hep-lat/0309186]  
*Presented at the 21st International Symposium on Lattice Field Theory (LATTICE 2003), Tsukuba, Ibaraki, Japan, 15-19 Jul 2003*
52. **“Chiral Structure in Baryon Magnetic Moments”**  
 R. D. Young, D. B. Leinweber and A. W. Thomas  
 Nucl. Phys. Proc. Suppl. **129**, 290 (2004) 3 pp. [arXiv:hep-lat/0309187]  
*Presented at the 21st International Symposium on Lattice Field Theory (LATTICE 2003), Tsukuba, Ibaraki, Japan, 15-19 Jul 2003*
51. **“Nucleon Electromagnetic Form Factors from Lattice QCD”**  
 J. D. Ashley, D. B. Leinweber, A. W. Thomas and R. D. Young  
 Eur. Phys. J. A **19**, 9 (2004) 6 pp. [arXiv:hep-lat/0308024]  
*Presented at ICTP 4th International Conference on Perspectives in Hadronic Physics, Trieste, Italy, 12-16 May 2003*
50. **“Observing Chiral Nonanalytic Behavior with FLIC Fermions”**  
 D. B. Leinweber, A. W. Thomas, A. G. Williams, R. D. Young, J. M. Zanotti and J. B. Zhang  
 Nucl. Phys. A **737**, 177 (2004) 5 pp. [arXiv:nucl-th/0308083]  
*Invited presentation at the 17th International IUPAP Conference on Few-Body Problems in Physics (FB 17), Durham, North Carolina, 5-10 Jun 2003*
49. **“Nucleon resonances from FLIC fermions”**  
 D. B. Leinweber, J. N. Hedditch, W. Melnitchouk, A. G. Williams and J. M. Zanotti  
 Prog. Theor. Phys. Suppl. **151**, 138 (2003) 5 pp.  
*Prepared for Tokyo - Adelaide Joint Workshop on Quarks, Astrophysics and Space Physics, Tokyo, Japan, 6-10 Jan 2003*
48. **“Progress In The Calculation Of Nucleon Form Factors And Parton Distribution Functions”**  
 A. W. Thomas, J. D. Ashley, W. Detmold, D. B. Leinweber, W. Melnitchouk and R. D. Young  
 Nucl. Phys. A **721**, 915 (2003) 7 pp.  
*Presented at the 16th International Conference on Particles and Nuclei (PANIC 02), Osaka, Japan, 30 Sep - 4 Oct 2002*
47. **“QCD and Hadron Structure”**  
 A. W. Thomas, D. B. Leinweber, R. D. Young and S. V. Wright  
 Mod. Phys. Lett. A **18**, 347 (2003) 9 pp.  
*Presented at the 2nd Asia Pacific Conference on Few-Body Problems in Physics (APFB 02), Shanghai, China, 27-30 Aug 2002*

46. **“Quenched Chiral Physics in Baryon Masses”**  
 R. D. Young, D. B. Leinweber, A. W. Thomas and S. V. Wright  
 (World Scientific, 2002) 155–163 9 pp. [arXiv:nucl-th/0211026]  
*Presented at the Joint CSSM / JHF / NITP Workshop on Physics at the Japan Hadron Facility, Adelaide, Australia, 14-21 Mar 2002*
45. **“Baryon Resonance Phenomenology”**  
 I. C. Cloet, D. B. Leinweber and A. W. Thomas  
 (World Scientific, 2002) 125–135 10 pp. [arXiv:nucl-th/0211027]  
*Presented at the Joint CSSM / JHF / NITP Workshop on Physics at the Japan Hadron Facility, Adelaide, Australia, 14-21 Mar 2002*
44. **“Hadron Masses from Novel Fat-Link Fermion Actions”**  
 J. M. Zanotti, S. Bilson-Thompson, F. D. R. Bonnet, D. B. Leinweber, A. G. Williams, J. B. Zhang, W. Melnitchouk, and F. X. Lee [CSSM Lattice Collaboration]  
 pp. 174–183 (World Scientific, 2002) 10 pp.  
*Presented at the Joint CSSM / JHF / NITP Workshop on Physics at the Japan Hadron Facility, Adelaide, Australia, 14-21 Mar 2002.*
43. **“Light Quark Simulations with FLIC Fermions”**  
 J. M. Zanotti, D. B. Leinweber, W. Melnitchouk, A. G. Williams and J. B. Zhang  
 Nucl. Phys. Proc. Suppl. **119**, 290 (2003) 3 pp. [arXiv:hep-lat/0210041]  
*Presented at the 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Jun 2002*
42. **“Excited Baryons from the FLIC Fermion Action”**  
 W. Melnitchouk, J. N. Hedditch, D. B. Leinweber, A. G. Williams, J. M. Zanotti and J. B. Zhang  
 Nucl. Phys. Proc. Suppl. **119**, 293 (2003) 3 pp. [arXiv:hep-lat/0210042]  
*Presented at the 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Jun 2002*
41. **“Spin-3/2 Baryons in Lattice QCD”**  
 J. M. Zanotti, S. Choe, D. B. Leinweber, W. Melnitchouk, A. G. Williams and J. B. Zhang  
 Nucl. Phys. Proc. Suppl. **119**, 299 (2003) 3 pp. [arXiv:hep-lat/0210043]  
*Presented at 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Jun 2002*
40. **“Chiral Nonanalytic Behaviour: The Edinburgh plot”**  
 S. V. Wright, D. B. Leinweber and A. W. Thomas  
 Nucl. Phys. Proc. Suppl. **119**, 236 (2003) 3 pp. [arXiv:hep-lat/0209024]  
*Presented at the 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Jun 2002*
39. **“Panel Discussion on Chiral Extrapolation of Physical Observables”**  
 C. Bernard, S. Hashimoto, D. B. Leinweber, P. Lepage, E. Pallante, S. R. Sharpe and H. Wittig  
 Nucl. Phys. Proc. Suppl. **119**, 170 (2003) 15 pp. [arXiv:hep-lat/0209086]  
*Presented at the 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Jun 2002*
38. **“Modelling the Quark Propagator”**  
 P. O. Bowman, U. M. Heller, D. B. Leinweber and A. G. Williams  
 Nucl. Phys. Proc. Suppl. **119**, 323 (2003) 3 pp. [arXiv:hep-lat/0209129]  
*Presented at the 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Jun 2002*

37. **“FLIC Overlap Fermions”**  
 W. Kamleh, D. B. Leinweber, A. G. Williams and J. B. Zhang  
 Nucl. Phys. Proc. Suppl. **119**, 825 (2003) 3 pp. [arXiv:hep-lat/0209155]  
*Presented at the 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Jun 2002*
36. **“FLIC-Overlap Fermions and Topology”**  
 W. Kamleh, D. J. Kusterer, D. B. Leinweber and A. G. Williams  
 Nucl. Phys. Proc. Suppl. **119**, 828 (2003) 3 pp. [arXiv:hep-lat/0209156]  
*Presented at the 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Jun 2002*
35. **“Towards the Continuum Limit of the Overlap Quark Propagator in Landau Gauge”**  
 J. B. Zhang, F. D. R. Bonnet, P. O. Bowman, D. B. Leinweber and A. G. Williams  
 Nucl. Phys. Proc. Suppl. **119**, 831 (2003) 3 pp. [arXiv:hep-lat/0208037]  
*Presented at 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Jun 2002*
34. **“FLIC Fermions and Hadron Phenomenology”**  
 D. B. Leinweber, J. N. Hedditch, W. Melnitchouk, A. W. Thomas, A. G. Williams, R. D. Young, J. M. Zanotti and J. B. Zhang  
 Eur. Phys. J. A **18**, 247–252 (2003) 6 pp. [arXiv:nucl-th/0211014]  
*Invited plenary session talk at the International Conference on Quarks and Nuclear Physics (QNP 2002), Julich, Germany, 9-14 Jun 2002*
33. **“Recent Developments in Quark Nuclear Physics”**  
 A. W. Thomas, D. B. Leinweber and R. D. Young  
 Eur. Phys. J. A **18**, 241 (2003) 5 pp.  
*Invited plenary session talk at the International Conference on Quarks and Nuclear Physics (QNP 2002), Julich, Germany, 9-14 Jun 2002*
32. **“Quark Propagator in a Covariant Gauge”**  
 F. D. Bonnet, D. B. Leinweber, A. G. Williams, J. M. Zanotti and J. B. Zhang  
 Nucl. Phys. Proc. Suppl. **109**, 158 (2002) 5 pp. [arXiv:hep-lat/0202011]  
*Presented at the Workshop on Lattice Hadron Physics, Cairns, Australia, 9-18 Jul 2001*
31. **“Novel Fat-Link Fermion Actions”**  
 J. M. Zanotti, S. Bilson-Thompson, F. D. R. Bonnet, P. D. Coddington, D. B. Leinweber, A. G. Williams, J. B. Zhang, W. Melnitchouk, and F. X. Lee [CSSM Lattice Collaboration]  
 Nucl. Phys. Proc. Suppl. **109**, 101 (2002) 5 pp. [arXiv:hep-lat/0201004]  
*Presented at the Workshop on Lattice Hadron Physics, Cairns, Australia, 9-18 Jul 2001*
30. **“Baryon Resonances from a Novel Fat-Link Fermion Action”**  
 W. Melnitchouk, J. N. Hedditch, D. B. Leinweber, A. G. Williams, J. M. Zanotti and J. B. Zhang  
 Nucl. Phys. Proc. Suppl. **109**, 96 (2002) 5 pp. [arXiv:hep-lat/0201005]  
*Presented at the Workshop on Lattice Hadron Physics, Cairns, Australia, 9-18 Jul 2001*
29. **“Chiral Behaviour of Baryon Masses in Quenched Lattice QCD”**  
 R. D. Young, D. B. Leinweber, A. W. Thomas and S. V. Wright  
 Nucl. Phys. Proc. Suppl. **109A**, 55 (2002) 5 pp.  
*Presented at the Workshop on Lattice Hadron Physics, Cairns, Australia, 9-18 Jul 2001*
28. **“Overlap Fermions, Improved Cooling and the Lattice Index Theorem”**  
 J. B. Zhang, S. O. Bilson-Thompson, F. D. Bonnet, D. B. Leinweber, A. G. Williams and

- J. M. Zanotti  
Nucl. Phys. Proc. Suppl. **109A**, 146 (2002) 5 pp.  
*Presented at the Workshop on Lattice Hadron Physics, Cairns, Australia, 9-18 Jul 2001*
27. **“Quenched Chiral Perturbation Theory for Baryon Form Factors”**  
D. B. Leinweber  
Nucl. Phys. Proc. Suppl. **109**, 45 (2002) 5 pp. [arXiv:hep-lat/0112021]  
*Presented at the Workshop on Lattice Hadron Physics, Cairns, Australia, 9-18 Jul 2001*
26. **“Cooling for Instantons and the Wrath of Nahm”**  
S. Bilson-Thompson, F. D. Bonnet, D. B. Leinweber and A. G. Williams  
Nucl. Phys. Proc. Suppl. **109**, 116 (2002) 5 pp. [arXiv:hep-lat/0112034]  
*Presented at the Workshop on Lattice Hadron Physics, Cairns, Australia, 9-18 Jul 2001*
25. **“Improving the Low-Lying Spectrum of the Overlap Kernel”**  
W. Kamleh, D. Adams, D. B. Leinweber and A. G. Williams  
Nucl. Phys. Proc. Suppl. **109**, 81 (2002) 5 pp. [arXiv:hep-lat/0112042]  
*Presented at the Workshop on Lattice Hadron Physics, Cairns, Australia, 9-18 Jul 2001*
24. **“Hadron Mass Extraction from Lattice QCD”**  
S. V. Wright, D. B. Leinweber, A. W. Thomas and K. Tsushima  
Nucl. Phys. Proc. Suppl. **109**, 50 (2002) 5 pp. [arXiv:hep-lat/0111053]  
*Presented at the Workshop on Lattice Hadron Physics, Cairns, Australia, 9-18 Jul 2001*
23. **“N\* Masses from an Anisotropic Lattice QCD Action”**  
F. X. Lee, D. B. Leinweber, L. Zhou, J. M. Zanotti and S. Choe  
Nucl. Phys. Proc. Suppl. **106**, 248 (2002) 3 pp. [arXiv:hep-lat/0110164]  
*Presented at the 19th International Symposium on Lattice Field Theory (Lattice 2001), Berlin, Germany, 19-24 Aug 2001*
22. **“A New Slant on Hadron Structure”**  
W. Detmold, D. B. Leinweber, W. Melnitchouk, A. W. Thomas and S. V. Wright.  
Pramana **57**, 251 (2001) 12 pp. [arXiv:nucl-th/0104043]  
*Presented at the International Symposium on Nuclear Physics (ISNP2K), Trombay, Mumbai, India, 18-22 Dec 2000*
21. **“Lattice QCD Calculations of Hadron Structure: Constituent Quarks and Chiral Symmetry”**  
D.B. Leinweber and A.W. Thomas.  
Nucl. Phys. **A684**, 35–43 (2000) 9 pp. [arXiv:nucl-th/0007058]  
*Presented at Few Body 2000, XVIth IUPAP International Conference on Few-Body Problems in Physics, National Taiwan University, Taipei, Taiwan, March 6–10, 2000, edited by T.-S.H. Lee and S.N. Yang.*
20. **“The Sigma Commutator from Lattice QCD”**  
S. V. Wright, D. B. Leinweber and A. W. Thomas.  
Nucl. Phys. **A680**, 137 (2000) 4 pp. [arXiv:nucl-th/0005003]  
*Presented at QNP 2000, International Conference on Quark Nuclear Physics, CSSM, Adelaide, Australia, February 21–25, 2000, edited by C. Boros and A.W. Thomas.*
19. **“Theoretical Perspective on the Strangeness Magnetic Form Factor”**  
D.B. Leinweber and A.W. Thomas.  
Nucl. Phys. **A680**, 117 (2000) 8 pp.  
*Presented at QNP 2000, International Conference on Quark Nuclear Physics, CSSM, Adelaide, Australia, February 21–25, 2000, edited by C. Boros and A.W. Thomas.*

18. **“Visualizations of the QCD Vacuum”**  
 D.B. Leinweber.  
 “Adelaide 1999, Light-cone QCD and Nonperturbative Hadron Physics,” pp. 138–143, (World Scientific, 2000) 6 pp. [arXiv:hep-lat/0004025]  
*Presented at Light-Cone ’99, Workshop on Light-Cone QCD and Nonperturbative Hadron Physics, CSSM, Adelaide, Australia, December 13–22, 1999, edited by A. Schreiber, A.G. Williams and A.W. Thomas.*
  
17. **“Gluon and Quark Propagators in Landau Gauge from the Lattice”**  
 A. G. Williams, P. O. Bowman, F. D. Bonnet, D. B. Leinweber and J. I. Skullerud.  
 “Adelaide 1999, Light-cone QCD and Nonperturbative Hadron Physics,” pp. 159–164, (World Scientific, 2000) 6 pp. [arXiv:hep-lat/0004025]  
*Presented at Light-Cone ’99, Workshop on Light-Cone QCD and Nonperturbative Hadron Physics, CSSM, Adelaide, Australia, December 13–22, 1999, edited by A. Schreiber, A.G. Williams and A.W. Thomas.*
  
16. **“Baryon Mass Extrapolation”**  
 D.B. Leinweber, A.W. Thomas, K. Tsushima and S.V. Wright.  
 Nucl. Phys. Proc. Suppl. **83**, 179 (2000) 3 pp. [arXiv:hep-lat/9909109]  
*In Lattice ’99, Proceedings of the International Symposium, in Pisa, Italy, 28 June – 3 July 1999, edited by A. Di Giacomo et al..*
  
15. **“Improved Landau Gauge Fixing and Discretisation Errors”**  
 F.D.R. Bonnet, P.O. Bowman, D.B. Leinweber, D.G. Richards and A.G. Williams.  
 Nucl. Phys. Proc. Suppl. **83**, 905–907 (2000) 3 pp. [arXiv:hep-lat/9909110]  
*In Lattice ’99, Proceedings of the International Symposium, in Pisa, Italy, 28 June – 3 July 1999, edited by A. Di Giacomo et al..*
  
14. **“Chiral Corrections to Baryon Masses Calculated within Lattice QCD”**  
 A.W. Thomas, D.B. Leinweber, K. Tsushima and S.V. Wright.  
 Nucl. Phys. **A663 & 664**, 973 (2000) 4 pp. [arXiv:nucl-th/9909041]  
*Presented at PANIC 99, International Conference on Particles and Nuclei, at Uppsala University, Sweden, 10–16 June 1999.*
  
13. **“Not Strange but Bizarre Physics from the SAMPLE Experiment”**  
 D. B. Leinweber.  
 “Adelaide 1998, Future Directions in Quark Nuclear Physics,” pp. 121–130, (World Scientific, 1999) 10 pp. [arXiv:nucl-th/9809050]  
*Presented at Future Directions in Quark Nuclear Physics, at the CSSM, U. Adelaide, SA, 10–20 March 1998, edited by A.W. Thomas and K. Tsushima.*
  
12. **“Improved Lattice QCD Actions for Hadron Phenomenology”**  
 D. B. Leinweber and F. X. Lee.  
 “Adelaide 1998, Nonperturbative Methods in Quantum Field Theory,” pp. 239–248 (World Scientific, 1999) 10 pp. [arXiv:hep-lat/9809119]  
*Presented at Nonperturbative Methods in Quantum Field Theory, at the CSSM, U. Adelaide, SA, 2–13 February 1998, edited by A.W. Schreiber, A.G. Williams, and A.W. Thomas.*
  
11. **“The Infrared Behaviour of the Gluon Propagator from Lattice QCD”**  
 D. B. Leinweber, J. I. Skullerud, and A. G. Williams.  
 “Adelaide 1998, Nonperturbative Methods in Quantum Field Theory,” pp. 97–103, (World Scientific, Singapore, 1999) 7 pp. [arXiv:hep-lat/9808033]  
*Presented at Nonperturbative Methods in Quantum Field Theory, at the CSSM, U. Adelaide, SA, 2–13 February 1998, edited by A.W. Schreiber, A.G. Williams, and A.W. Thomas.*

10. **“Negative-Parity Baryon Spectroscopy”**  
 F. X. Lee and D. B. Leinweber.  
 Nucl. Phys. Proc. Suppl. **73** 258 (1998) 3 pp. [arXiv:hep-lat/9809095]  
*In Lattice '98, Proceedings of the International Symposium, in Boulder, CO, 1998, edited by T. DeGrand, C. DeTar, R. Sugar, and D. Toussaint.*
9. **“Structure of the Gluon Propagator”**  
 D. B. Leinweber, C. Parrinello, J. I. Skullerud, and A. G. Williams.  
 Nucl. Phys. Proc. Suppl. **73** 626 (1998) 3 pp. [arXiv:hep-lat/9809030]  
*In Lattice '98, Proceedings of the International Symposium, in Boulder, CO, 1998, edited by T. DeGrand, C. DeTar, R. Sugar, and D. Toussaint.*
8. **“Modeling the Gluon Propagator”**  
 D. B. Leinweber, C. Parrinello, J. I. Skullerud, and A. G. Williams.  
 Nucl. Phys. Proc. Suppl. **73** 629 (1998) 3 pp. [arXiv:hep-lat/9809031]  
*In Lattice '98, Proceedings of the International Symposium, in Boulder, CO, 1998, edited by T. DeGrand, C. DeTar, R. Sugar, and D. Toussaint.*
7. **“Essential Strangeness in Nucleon Magnetic Moments”**  
 Derek B. Leinweber.  
 Nucl. Phys. **A585**, 341 (1995) 2 pp. [arXiv:nucl-th/9407039]  
*Presented at HYP94, International Conference on Hypernuclear and Strange Particle Physics, in Vancouver, BC, July 4–8, 1994.*
6. **“Hadron Electromagnetic Structure: Shedding Light on Models and their Mechanisms”**  
 Derek B. Leinweber.  
 Nucl. Phys. Proc. Suppl. **34**, 383 (1994) 3 pp. [arXiv:hep-ph/9402228]  
*Presented at Lattice '93, International Symposium on Lattice Field Theory, in Dallas, Texas, October 12–16, 1993.*
5. **“A Few Points on Point-to-Point Correlation Functions”**  
 Derek B. Leinweber.  
 Nucl. Phys. Proc. Suppl. **34**, 407 (1994) 4 pp. [arXiv:hep-lat/9401005]  
*Presented at Lattice '93, International Symposium on Lattice Field Theory, Dallas, Texas, October 12–16, 1993.*
4. **“Nucleon and Hyperon Electromagnetic Transitions”**  
 Terrence Draper, Derek B. Leinweber and R.M. Woloshyn.  
 Nucl. Phys. Proc. Suppl. **30**, 427 (1993) 4 pp.  
*In the proceedings of Lattice 92, International Symposium on Lattice Field Theory, in Amsterdam, The Netherlands, September 15–19, 1992.*
3. **“Multipole Moments of Spin-3/2 Baryons”**  
 Terrence Draper, Derek B. Leinweber and R.M. Woloshyn.  
 Nucl. Phys. Proc. Suppl. **B26**, 403 (1992) 3 pp.  
*In the proceedings of Lattice 91, International Symposium on Lattice Field Theory, at the National Laboratory for High Energy Physics, Tsukuba, Japan, November 5–9, 1991.*
2. **“On the Electromagnetic Properties of the Baryon Octet”**  
 Derek B. Leinweber, R.M. Woloshyn and Terrence Draper.  
 Nucl. Phys. Proc. Suppl. **B20**, 463 (1991) 4 pp.  
*In the proceedings of Lattice 90, International Symposium on Lattice Field Theory, at the Supercomputer Computations Research Institute, Florida State University, Tallahassee, Florida, USA, October 8–12, 1990.*

1. **“Lattice Calculation of Baryonic Electromagnetic Form Factors”**  
Terrence Draper, Derek B. Leinweber, R.M. Woloshyn and K.F. Liu.  
Nucl. Phys. **A527**, 531C (1991) 3 pp.  
*Presented at Panic XII, International Conference on Particles and Nuclei, at M.I.T., Cambridge, Massachusetts, USA, June 25–29, 1990.*

## Publications – Conference Proceedings

10. **“Hadron structure on the back of an envelope”**  
A. W. Thomas, R. D. Young and D. B. Leinweber  
Frascati 2005, “Quark-hadron duality and the transition to pQCD,” 41-49 (2005) 9 pp.  
[arXiv:nucl-th/0509082]  
*Invited talk at 1st Workshop on Quark-Hadron Duality and the Transition to pQCD, Frascati, Rome, Italy, 6-8 Jun 2005*
9. **“Hybrid mesons on the lattice with FLIC fermions”**  
J. N. Hedditch, B. G. Lasscock, D. B. Leinweber, A. G. Williams and J. M. Zanotti  
Proceedings of the Workshop on Gluonic Excitations, Newport News, Virginia, 14-16 May 2003 (2004) 10 pp.
8. **“The Nucleon Mass In Chiral Effective Field Theory”**  
R. D. Young, D. B. Leinweber and A. W. Thomas  
“Edinburgh 2003, QCD and numerical analysis,” 113 (2003) 8 pp.  
*Prepared for 3rd International Workshop on Numerical Analysis and Lattice QCD, Edinburgh, Scotland, 30 Jun - 4 Jul 2003*
7. **“Nonperturbative Chiral Corrections for Lattice QCD”**  
A.W. Thomas, D.B. Leinweber and D.H. Lu.  
(World Scientific, 2002) 124 7 pp. [arXiv:hep-ph/9905414]  
*In the proceedings of the International Symposium on Nuclear Electro-Weak Spectroscopy (NEWS 99) for Symmetries and Electro-Weak Nuclear-Processes, in Osaka, Japan, 9-12 March 1999.*
6. **“The Transition from Nonperturbative to Perturbative QCD”**  
A.G. Williams, F. D. Bonnet, P. O. Bowman, D. B. Leinweber, J. I. Skullerud and J. M. Zanotti  
pp. 189–196 (World Scientific, 2002) 8 pp.  
*In the proceedings of the Sixth Workshop on Non-perturbative QCD in Paris, France, June 2001.*
5. **“Lattice Gauge Theory Studies of the Gluon Propagator”**  
D. B. Leinweber, J. I. Skullerud, and A. G. Williams.  
“Paris 1998, Quantum chromodynamics,” pp. 397–404 (World Scientific, Singapore, 1999) 8 pp. [arXiv:hep-lat/9808037]  
*In the Proceedings of the IV Workshop on Quantum Chromodynamics, at the American University of Paris, Paris, France, 1–6 June 1998, edited by H.M. Fried and B. Müller.*
4. **“Light Hadron Masses on Coarse Lattices with Improved Actions”**  
Frank X. Lee and Derek B. Leinweber.  
“Williamsburg 1996, Particles and nuclei,” pp. 617–618 (1997) 2 pp. [arXiv:hep-lat/9606005]  
*Presented at PANIC 96, 14th International Conference on Particles and Nuclei, in Williamsburg, VA, May 22–28, 1996.*

3. **“New QCD Sum Rules for Nucleon Axial-Vector Coupling Constants”**  
Frank X. Lee, Derek B. Leinweber and Xuemin Jin.  
“Williamsburg 1996, Particles and nuclei,” pp. 623–624 (1997) 2 pp. [arXiv:nucl-th/9606026]  
*Presented at PANIC 96, 14th International Conference on Particles and Nuclei, in Williamsburg, VA, May 22–28, 1996.*
2. **“New QCD Sum Rules for In-Medium Nucleons”**  
Derek B. Leinweber, Xuemin Jin, and R. J. Furnstahl.  
“Baryons ’95,” pp. 531–534, (World Scientific, 1996) 4 pp. [arXiv:nucl-th/9511031]  
*In the proceedings of Baryons ’95, 7th International Conference on the Structure of Baryons, in Santa Fe, NM, Oct. 3–7, 1995, Edited by B.F. Gibson, P.D. Barnes, J.B. McClelland, W. Weise.*
1. **“Hadronic Multipole Moments from Lattice QCD”**  
Terrence Draper, Derek B. Leinweber and R.M. Woloshyn.  
“DPF Conf. 1992,” pp. 1494–1496, (World Scientific, 1993) 3 pp.  
*In the proceedings of The Fermilab Meeting DPF 92, 7th Meeting of the American Physical Society Division of Particles and Fields, at FNAL, Batavia, IL, November 10–14 1992, edited by C.H. Albright, P.H. Kasper, R. Raja and J. Yoh.*

## Publications – Magazine Articles and QCD Visualizations

14. **“From Paradox to Paradigm”**. F. Wilczek. Contributed visualization of QCD vacuum action-density structure. *Les Prix Nobel. The Nobel Prizes 2004*, Editor Tore Frängsmyr, [Nobel Foundation], Stockholm, 2005.
13. **“Lattice QCD”**. Kurt Riesselman *et al.*. Contributed visualization of QCD vacuum action-density structure. “Symmetry Magazine, published jointly by Fermilab and the Stanford Linear Accelerator Facility (SLAC)” (2005)
12. **“Física de Partículas, Viaje al Interior del Protón”**. Bruno Juliá Díaz. Contributed two visualizations of proton structure as revealed in lattice QCD. *Heraldo de Aragon, Tercer Milenio #447*, 24 April 2007.
11. **“University Physics,” First Edition**. Wolfgang Bauer and Gary Westfall. Contributed visualization of the vacuum topological charge density, McGraw-Hill (2007).
10. **“Journey Into the Heart of Matter”**. Argonne National Lab, *et al.*. Contributed visualization of a meson “flux tube”. Office of Science, U.S. Department of Energy.  
<http://www.science.doe.gov/feature/NP.htm>
9. **“Canadian Subatomic Physics Long Range Plan”** Garth Huber *et al.*. Contributed visualization of a meson “flux tube” Canadian Subatomic Physics Long Range Plan, 2006.  
[http://lichen.phys.uregina.ca/dnp/files/LRPC\\_Report\\_Final\\_06Nov.pdf](http://lichen.phys.uregina.ca/dnp/files/LRPC_Report_Final_06Nov.pdf)
8. **“Hadron Physics”**. I. J. D. MacGregor and R. Kaiser. Contributed cover image of the baryonic flux-tube distribution. In “Hadron Physics,” Scottish Graduate series (Chapman & Hall/CRC, Taylor & Francis) 2006.
7. **“UKQCD/IBM/Columbia QCDOC Lattice QCD Machine”**. Harry Yeates *et al.*. Contributed visualization of QCD vacuum structure. “PC Plus Magazine ([www.pcplus.co.uk](http://www.pcplus.co.uk)), published in the UK ” (2005)
6. **“Proceedings of the 58th Scottish Summer School in Physics”**. Ralf Kaiser *et al.*. Contributed visualization of baryon flux tubes. “Published by Institute of Physics Publishing, UK” (2005)

5. **“The Search for QCD Exotics”**. Alex R. Dzierba *et al.*. Contributed cover page visualization of meson flux tubes. “Postepy Fizyki (Advances in Physics), Polish Physical Society” (2005)
4. **“Physicists probe the proton”**  
Derek Leinweber and Cheryl Jones  
“Australian Partnership for Advanced Computing (APAC) Research using the National Facility 2001-2002” p. 21 (2002)
3. **“Las trituradoras de números”**  
Abraham Alonso *et al.*  
Contributed visualization of QCD vacuum structure.  
Cartas MUY Magazine, Madrid, Spain, No. **241** (2001) 154
2. **“Annual Report of the South Australian Branch of the Australian Institute of Physics”**  
D. B. Leinweber  
“The Physicist,” Vol. **38**, No. 2 (2001) 51
1. **“Annual Report of the South Australian Branch of the Australian Institute of Physics”**  
D. B. Leinweber  
“The Physicist,” Vol. **37**, No. 2 (2000) 68

## Publications – Newspaper Articles

16. **“Screaming Magnets”**  
Derek Leinweber  
Could renowned physicist Michael Faraday - as he played around with magnets and coils of wire in his 1831 laboratory - have anticipated the wild screams of Jimi Hendrix’s distorted guitar revolutionising the music scene of the ’60s?  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 24 November 2007.
15. **“Probably Certain”**  
Derek Leinweber  
Yes, the logic behind the universe is fuzzy. . . Article connects humour writer Douglas Adam’s *Infinite Improbability Drive* to the multiple paths a particle explores in quantum mechanics.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 1 July 2007.
14. **“Carbon Fading”**  
Derek Leinweber  
The world needs to drive a wedge into greenhouse emissions. Here are seven ways to clean up.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 19 May 2007.
13. **“Time to Ponder”**  
Derek Leinweber  
We all know it’s Einstein’s greatest idea. But what actually is it?  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 31 March 2007.
12. **“Wired For Quality”**  
Derek Leinweber  
Sometimes it does take a rocket scientist to figure out how to connect the DVD.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 17 February 2007.

11. **“Cricket in Full Swing”**  
Derek Leinweber  
There’s a third way to make a cricket ball move in the air. It’s called Contrast Swing.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 2 December 2006.
10. **“Turbulent Times”**  
Derek Leinweber  
Have you seen the new 2006 World Cup soccer ball? It’s called the “Teamgeist” and represents a radical departure from classic soccer-ball design.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 10 June 2006.
9. **“Surprise attack”**  
Derek Leinweber  
Explores soccer-ball aerodynamics with an emphasis on “the dip” induced by the turbulent to laminar flow transition at the critical speed.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 27 May 2006.
8. **“Food for thought”**  
Derek Leinweber  
Explains the link between greenhouse gases and the Antarctic ozone hole and their effects on Australia’s multibillion-dollar fishing and wine industries.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 6 May 2006.
7. **“Feelin’ Hot Hot Hot”**  
Derek Leinweber  
Links issues of global warming to recent changes in ocean thermohaline circulation.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 25 March 2006.
6. **“Swinger’s Delight”**  
Derek Leinweber  
Probes the mystery of cricket ball swing with an emphasis on the role of humidity.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 31 December 2005.
5. **“To be or not to be. The weird, ghostly worlds of Einstein’s mind.”**  
Derek Leinweber  
Describes, in an engaging manner, the essential idea of non-locality in quantum mechanics and the challenges to realism that Einstein pondered extensively during the emergence of quantum mechanics.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 24 December 2005.
4. **“Striving for Gold”**  
Derek Leinweber  
Reviews the ancient Alchemist’s dream to turn lead into gold and reveals the manner in which it is done with modern-day nuclear physics.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 8 October 2005.
3. **“Behind the Seams”**  
Derek Leinweber  
Explores the aerodynamics behind cricket ball swing, including reverse swing.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 10 September 2005.
2. **“Need for Speed”**  
Derek Leinweber  
Describes what makes a modern supercomputer super.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 23 July 2005.

1. **“Explosive Origins”**  
Derek Leinweber  
Reveals the origin of the elements of the periodic table. We are made of star dust.  
In the column *Can you Believe it?*, Adelaide Advertiser, Saturday 2 July 2005.

## **Publications – Web Page Projects**

7. **“Visualizations of Quantum Chromodynamics (QCD)”**  
D. B. Leinweber  
<http://www.physics.adelaide.edu.au/theory/staff/leinweber/VisualQCD/Nobel/>  
Includes animations featured in Prof. Frank Wilczek’s 2004 Nobel Prize Lecture  
May 2003 to present
6. **“Origin of Mass”**  
D. B. Leinweber  
<http://www.physics.adelaide.edu.au/theory/staff/leinweber/VisualQCD/OriginMass/>  
Approximately 100 page requests per month  
Aug 2001 to present
5. **“Visual QCD Archives”**  
D. B. Leinweber  
<http://www.physics.adelaide.edu.au/theory/staff/leinweber/VisualQCD/QCDvacuum/>  
Approximately 200 page requests per month  
Sept 1999 to present
4. **“What Can You Do With a Physics Degree?”**  
D. B. Leinweber  
<http://www.physics.adelaide.edu.au/aip-sa/PhysicsCareers.html>  
Approximately 500 page requests per month  
1997 to present
3. **“Physics Careers”**  
D. B. Leinweber  
<http://www.physics.adelaide.edu.au/jobs/Jobs.html>  
Approximately 1500 page requests per month  
1997 to present
2. **“Cool Links to Hot Topics in Physics”**  
P. Bowman, D. B. Leinweber, A. W. Thomas  
<http://www.physics.adelaide.edu.au/cssm/CoolLinks.html>  
Approximately 900 page requests per month  
1998 to present
1. **“Australian Institute of Physics Job Advertisements”**  
D. B. Leinweber, *et al.*  
<http://www.physics.adelaide.edu.au/jobs/AusJobs.html>  
Approximately 300 page requests per month  
1997 to 2003