

LIST OF PUBLICATIONS of Pietro Giudice (updated to: 27 October 2015)

Refereed Publications:

1. P. Giudice and A. Papa,
“Real and imaginary chemical potential in 2-color QCD”,
Phys. Rev. D 69 (2004) 094509, 16 pages [[arXiv:hep-lat/0401024](#)].
2. R. Fiore, P. Giudice, D. Giuliano, D. Marmottini, A. Papa and P. Sodano,
“QED(3) on a space-time lattice: Compact versus noncompact formulation”,
Phys. Rev. D72 (2005) 094508, 7 pages [[arXiv:hep-lat/0506020](#)].
3. P. Giudice, F. Gliozzi and S. Lottini,
“Quantum broadening of k-strings in gauge theories”,
JHEP {0701} (2007) 084, 16 pages [[arXiv:hep-th/0612131](#)].
4. P. Giudice and S. Hands,
“Can we study quark matter in the quenched approximation?”,
Nuclear Physics B {789} (2008) 111, 22 pages [[arXiv:hep-lat/0703001](#)].
5. P. Giudice, F. Gliozzi and S. Lottini,
“The conformal anomaly of k-strings”,
JHEP {0705} (2007) 010, 14 pages [[arXiv:hep-th/0703153](#)].
6. M. Caselle, P. Giudice, F. Gliozzi, P. Grinza and S. Lottini,
“K-string tensions at finite temperature and integrable models”,
JHEP {0711} (2007) 075, 20 pages [[arXiv:0710.3522 \[hep-lat\]](#)].
7. R. Fiore, P. Giudice and A. Papa,
“Non-compact QED3 at finite temperature: the confinement-deconfinement transition”,
JHEP {0811} (2008) 055, 26 pages [[arXiv:0808.1631 \[hep-lat\]](#)].
8. P. Giudice, F. Gliozzi and S. Lottini,
“The confining string beyond the free-string approximation in the gauge dual of percolation”,
JHEP {0903} (2009) 104, 13 pages [[arXiv:0901.0748 \[hep-lat\]](#)].
9. P. Cea, L. Cosmai, P. Giudice and A. Papa,
“Chiral Symmetry Breaking in Planar QED in External Magnetic Fields”,
Phys. Rev. D85 (2012) 094505, 6 pages [[arXiv:1204.6112 \[hep-lat\]](#)].
10. P. Giudice, D. McManus and M. Peardon,
“Comparison of analysis techniques for extracting resonance parameters from lattice Monte Carlo data”,
Phys. Rev. D86 074516 (2012), 16 pages [[arXiv:1204.2745 \[hep-lat\]](#)].
11. S. Cotter, P. Giudice, S. Hands and J.-I. Skullerud,
“Towards the phase diagram of dense two-color matter”,
Phys. Rev. D 87 (2013) 3, 034507, 19 pages [[arXiv:1210.4496 \[hep-lat\]](#)].
12. G. Aarts, P. Giudice and E. Seiler,
“Localised distributions and criteria for correctness in complex Langevin dynamics”,
Annals Phys. 337 (2013) 238, 32 pages [[arXiv:1306.3075 \[hep-lat\]](#)].

13. A. Amato, G. Aarts, C. Allton, P. Giudice, S. Hands and J.-I. Skullerud,
 ‘‘Electrical conductivity of the quark-gluon plasma across the deconfinement transition’’,
Phys. Rev. Lett. 111 (2013) 172001, 4 pages [[arXiv:1307.6763 \[hep-lat\]](#)].
14. G. Bergner, P. Giudice, G. Muenster, S. Piemonte and D. Sandbrink,
 ‘‘Phase structure of the N=1 supersymmetric Yang-Mills theory at finite temperature’’,
JHEP {\bf 1411} (2014) 049, 26 pages [[arXiv:1405.3180 \[hep-lat\]](#)].
15. G. Aarts, C. Allton, A. Amato, P. Giudice, S. Hands and J. I. Skullerud,
 ‘‘Electrical conductivity and charge diffusion in thermal QCD from the lattice’’,
JHEP {\bf 1502} (2015) 186, 29 pages [[arXiv:1412.6411 \[hep-lat\]](#)].
16. A. Amato, P. Giudice and S. Hands,
 ‘‘Hadron wave functions as a probe of a two-color baryonic medium,’’
Eur. Phys. J. A {\bf 51} (2015) 39 [[arXiv:1501.03004 \[hep-lat\]](#)].

Proceedings of International Conferences:

1. P. Giudice and A. Papa,
 ‘‘Finite temperature 2-color QCD for real and imaginary chemical potential’’,
 in proceedings of
 ‘‘LATTICE 2004: XXII International Symposium on Lattice Field Theory’’,
[arXiv:hep-lat/040922](#), *Nucl. Phys. B* (Proc. Suppl.) 140, 529–531 (2005).
2. R. Fiore, P. Giudice and A. Papa,
 ‘‘Numerical test of Polyakov loop models in high temperature SU(2)’’,
 in proceedings of
 ‘‘LATTICE 2004: XXII International Symposium on Lattice Field Theory’’,
[arXiv:hep-lat/0409024](#), *Nucl. Phys. B* (Proc. Suppl.) 140, 583–585 (2005).
3. R. Fiore, P. Giudice, D. Giuliano, D. Marmottini, A. Papa and P. Sodano,
 ‘‘QED_3 on a space-time lattice: a comparison between compact and
 noncompact formulation’’,
 in proceedings of
 ‘‘LATTICE 2005: XXIII International Symposium on Lattice Field Theory’’,
[arXiv:hep-lat/0509183](#), PoS (LAT2005) 243.
4. P. Giudice, F. Gliozzi and S. Lottini,
 ‘‘Quantum fluctuations of k-strings: A Case study’’,
 in proceedings of
 ‘‘LATTICE 2006: XXIV International Symposium on Lattice Field Theory’’,
[arXiv:hep-lat/0609055](#), PoS (LAT2006) 065.
5. P. Giudice, F. Gliozzi and S. Lottini,
 ‘‘Broadening of the confining flux tube joining higher-representation
 sources’’
 in proceedings of
 ‘‘LATTICE 2006: XXIV International Symposium on Lattice Field Theory’’,
[arXiv:hep-lat/0609060](#), PoS (LAT2006) 070.

6. P. Giudice and S. Hands,
“Two Color Matter in the Quenched Approximation”,
in proceedings of
“LATTICE 2007: XXV International Symposium on Lattice Field Theory”,
arXiv:0709.0425 [hep-lat], PoS(LATTICE 2007)186.
7. P. Giudice, F. Gliozzi and S. Lottini,
“On the Conformal anomaly of k-strings”,
in proceedings of
“LATTICE 2007: XXV International Symposium on Lattice Field Theory”,
arXiv:0710.0764 [hep-lat], PoS(LATTICE 2007)302.
8. P. Grinza, M. Caselle, P. Giudice, F. Gliozzi and S. Lottini,
“On the ratio of string tensions in the 3D Z_4 lattice gauge theory”,
in proceedings of
“LATTICE 2007: XXV International Symposium on Lattice Field Theory”,
arXiv:0710.0488 [hep-lat], PoS(LATTICE 2007)306.
9. P. Giudice, F. Gliozzi and S. Lottini,
“Universal properties of the confining string in the random
percolation model”,
in proceedings of
“LATTICE 2007: XXV International Symposium on Lattice Field Theory”,
arXiv:0709.4336 [hep-lat], PoS(LATTICE 2007)314.
10. P. Giudice, F. Gliozzi and S. Lottini,
“Confining string beyond the free approximation: the case of random
percolation”,
in proceedings of
“LATTICE 2008: XXVI International Symposium on Lattice Field Theory”,
[arXiv:0811.2879 [hep-lat]], PoS (LATTICE2008) (2008) 264.
11. P. Giudice, F. Gliozzi and S. Lottini,
“The monopole mass in the random percolation gauge theory”,
in proceedings of
“LATTICE 2008: XXVI International Symposium on Lattice Field Theory”,
[arXiv:0811.2722 [hep-lat]], PoS (LATTICE2008) (2008) 265.
12. M. Caselle, F. Gliozzi, G. Delfino, P. Giudice, P. Grinza, S. Lottini
and N. Magnoli,
“Integrable structures in LGTs near the deconfinement transition”,
“LATTICE 2009: XXVII International Symposium on Lattice Field Theory”,
[arXiv:0912.0388 [hep-lat]], PoS (LATTICE2009) (2009) 239.
13. P. Giudice, M.J. Peardon,
“Hadronic decay width from finite-volume energy spectrum in lattice QCD”,
in proceedings of
“Hadron 2009: XIII International Conference on Hadron Spectroscopy”
[arXiv:1010.1390 [hep-lat]], AIP Conf. Proc. 1257 (2010) 784–788.
14. P. Giudice, D. McManus, M. Peardon,
“Extracting resonance parameters from lattice data”,
in proceedings of
“LATTICE 2010: XXVIII International Symposium on Lattice Field Theory”,
[arXiv:1009.6192 [hep-lat]], PoS (LATTICE2010) (2010) 105.

15. P. Cea, L. Cosmai, P. Giudice, A. Papa,
“Lattice Planar QED in external magnetic field”,
in proceedings of
“LATTICE 2011: XXIX International Symposium on Lattice Field Theory”.
[arXiv:1109.6549 [hep-lat]], PoS (LATTICE2011) (2011) 307.
16. P. Giudice, S. Hands, J.-I. Skullderud
“Quark number susceptibility at finite density and low temperature”,
in proceedings of
“LATTICE 2011: XXIX International Symposium on Lattice Field Theory”.
[arXiv:1110.6112 [hep-lat]], PoS (LATTICE2011) (2011) 193.
17. S. Hands, S. Cotter, P. Giudice and J.-I. Skullderud,
“The Phase Diagram of Two Color QCD”,
in proceedings of
“Extreme QCD” workshop, Washington DC, 21-23 August 2012”.
arXiv:1210.6559 [hep-lat].
18. S. Cotter, J.-I. Skullderud, P. Giudice, S. Hands, S. Kim and D. Mehta,
“Phase structure of QC2D at high temperature and density”,
in proceedings of
“LATTICE 2012: XXX International Symposium on Lattice Field Theory”.
[arXiv:1210.6757 [hep-lat]], PoS (LATTICE2012) (2012) 091.
19. P. Giudice, G. Aarts and E. Seiler,
“Localised distributions in complex Langevin dynamics”,
in proceedings of
“LATTICE 2013: XXXI International Symposium on Lattice Field Theory”.
arXiv:1309.3191 [hep-lat], PoS (LATTICE2013) (2013) 200.
20. P.W.M. Evans, C. Allton, P. Giudice and J.-I. Skullderud,
“Charmonium Potentials At Non-Zero Temperature”,
in proceedings of
“LATTICE 2013: XXXI International Symposium on Lattice Field Theory”.
arXiv:1309.3415 [hep-lat], PoS (LATTICE2013) (2013) 168.
21. P. Giudice, G. Aarts, C. Allton, A. Amato, S. Hands and J.-I. Skullderud,
“Electric charge susceptibility in 2+1 flavour QCD on an anisotropic lattice”,
in proceedings of
“LATTICE 2013: XXXI International Symposium on Lattice Field Theory”.
arXiv:1309.6253 [hep-lat], PoS (LATTICE2013) (2013) 492.
22. C. Allton, G. Aarts, A. Amato, W. Evans, P. Giudice, S. Hands, A. Kelly, S. Kim,
M.-P. Lombardo, S. Ryan, J.-I. Skullderud and T. Harris,
“Quark-gluon plasma phenomenology from the lattice”,
in proceedings of
“International Conference on Strangeness in Quark Matter 2013 (SQM 2013)”.
arXiv:1310.5135 [hep-lat].
23. A. Amato, G. Aarts, C. Allton, P. Giudice, S. Hands and J.-I. Skullderud,
“Transport coefficients of the QGP”,
in proceedings of
“LATTICE 2013: XXXI International Symposium on Lattice Field Theory”.
arXiv:1310.7466 [hep-lat], PoS (LATTICE2013) (2013) 176.

24. S. Cotter, P. Giudice, S. Hands and J.-I. Skullerud,
 ‘‘Determination of Karsch Coefficients for 2-colour QCD’’,
 in proceedings of
 ‘‘LATTICE 2013: XXXI International Symposium on Lattice Field Theory’’.
 arXiv:1311.2848 [hep-lat], PoS (LATTICE2013) (2013) 192.
25. C. Allton, G. Aarts, A. Amato, W. Evans, P. Giudice, T. Harris, S. Hands,
 A. Kelly, S.M. Ryan and J.I. Skullerud
 ‘‘2+1 flavour thermal studies on an anisotropic lattice’’,
 in proceedings of
 ‘‘LATTICE 2013: XXXI International Symposium on Lattice Field Theory’’.
 arXiv:1401.2116 [hep-lat], PoS (LATTICE2013) (2013) 151.
26. G. Bergner, P. Giudice, I. Montvay, G. Muenster, U. D. Oezugurel, S. Piemonte
 and D. Sandbrink,
 ‘‘Latest lattice results of N=1 supersymmetric Yang-Mills theory with some
 topological insights,’’
 in proceedings of
 ‘‘LATTICE 2014: XXXII International Symposium on Lattice Field Theory’’.
 arXiv:1411.1746 [hep-lat], PoS (LATTICE2014) (2014) 273.
27. G. Bergner, P. Giudice, G. Muenster, S. Piemonte and D. Sandbrink,
 ‘‘First studies of the phase diagram of N=1 supersymmetric Yang-Mills theory,’’
 in proceedings of
 ‘‘LATTICE 2014: XXXII International Symposium on Lattice Field Theory’’.
 PoS LATTICE {2014} (2014) 262, [arXiv:1501.02746 [hep-lat]].
28. T. Boz, P. Giudice, S. Hands, J. I. Skullerud and A. G. Williams,
 ‘‘Two-color QCD at high density’’,
 in proceedings of
 ‘‘11th Conference on Quark Confinement and the Hadron Spectrum (Confinement XI)’’.
 arXiv:1502.01219 [hep-lat].
29. J. I. Skullerud, G. Aarts, C. Allton, A. Amato, Y. Burnier, P. W. M. Evans,
 P. Giudice and S. Hands {et al.},
 ‘‘Quark-gluon plasma phenomenology from anisotropic lattice QCD,’’
 in proceedings of
 ‘‘11th Conference on Quark Confinement and the Hadron Spectrum (Confinement XI)’’.
 arXiv:1501.00018 [nucl-th].
30. G. Aarts, C. Allton, W. Evans, P. Giudice, T. Harris, A. Kelly, S. Kim
 and M. P. Lombardo {et al.},
 ‘‘Bottomonium in the plasma: lattice results,’’
 in proceedings of
 ‘‘QCD@Work, International Workshop on QCD, theory and experiment,’’
 EPJ Web Conf. {80} (2014) 00029, [arXiv:1411.7580 [hep-lat]].
31. G. Bergner, P. Giudice, I. Montvay, G. Muenster and S. Piemonte,
 ‘‘The low-lying spectrum of N=1 supersymmetric Yang-Mills theory,’’
 in proceedings of
 ‘‘European Physical Society Conference on High Energy Physics (EPS-HEP 2015),’’
 PoS(EPS-HEP2015) 372 [arXiv:1510.04942 [hep-lat]].

32. G. Bergner, P. Giudice, G. Mnster and S. Piemonte,
 ‘‘Witten index and phase diagram of compactified N=1 supersymmetric Yang-Mills
 theory on the lattice,’’
 in proceedings of
 ‘‘LATTICE 2015: XXXIII International Symposium on Lattice Field Theory’’.
 PoS(LATTICE 2015) 239 [arXiv:1510.05926 [hep-lat]].
33. G. Bergner, P. Giudice, G. Mnster and S. Piemonte,
 ‘‘Supermultiplets of the N=1 supersymmetric Yang-Mills theory in the continuum limit,’’
 in proceedings of
 ‘‘LATTICE 2015: XXXIII International Symposium on Lattice Field Theory’’.
 PoS(LATTICE 2015) 240 [arXiv:1510.05926 [hep-lat]].
34. G. Bergner, P. Giudice, G. Mnster and S. Piemonte,
 ‘‘Lattice simulations of technicolour theories with adjoint fermions and supersymmetric
 Yang-Mills theory,’’
 in proceedings of
 ‘‘LATTICE 2015: XXXIII International Symposium on Lattice Field Theory’’.
 PoS(LATTICE 2015) 227 [arXiv:1510.05926 [hep-lat]].

Only in ArXiv, soon published:

1. G. Bergner, P. Giudice, I. Montvay, G. Muenster and S. Piemonte,
 ‘‘Influence of topology on the scale setting’’, arXiv:1411.6995 [hep-lat].
2. C. Allton, W. Evans, P. Giudice and J. I. Skullerud,
 ‘‘The Charmonium Potential at Non-Zero Temperature,’’
 arXiv:1505.06616 [hep-lat].