

FIAS Publications 2006

- [1] A. Adil, H.-J. Drescher, A. Dumitru, A. Hayashigaki, and Y. Nara, “Eccentricity in heavy-ion collisions from Color Glass Condensate initial conditions,” *Phys. Rev.* **C74** (2006) 044905, [arXiv:nucl-th/0605012](https://arxiv.org/abs/nucl-th/0605012).
- [2] D. Antypov and C. Holm, “Optimal cell approach to osmotic properties of finite stiff-chain polyelectrolytes,” *Phys. Rev. Lett.* **96** (2006) 088302.
- [3] D. Antypov and C. Holm, “The Osmotic Behavior of Short Stiff Polyelectrolytes,” in *41st Int. Symposium on Macromolecules*, Rio de Janeiro, Brazil, 16-21 Jul. 2006, vol. 245-246, pp. 297–306. 2006.
- [4] A. Arnold, B. A. Mann, and C. Holm, “Simulating Charged Systems with ESPResSo,” in *Computer Simulations in Condensed Matter: from Materials to Chemical Biology*, M. Ferrario, G. Ciccotti, and K. Binder, eds., vol. 703 of *Lecture Notes in Physics*, pp. 193–222. Springer, Berlin, Germany, 2006.
- [5] V. V. Begun, L. Ferroni, M. I. Gorenstein, M. Gazdzicki, and F. Becattini, “Threshold effects in relativistic gases,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 1003–1020, [arXiv:nucl-th/0512070](https://arxiv.org/abs/nucl-th/0512070).
- [6] V. V. Begun, M. I. Gorenstein, A. P. Kostyuk, and O. S. Zozulya, “Quantum gases in the grand microcanonical ensemble near the thermodynamic limit,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 935–947, [arXiv:nucl-th/0505069](https://arxiv.org/abs/nucl-th/0505069).
- [7] V. V. Begun and M. I. Gorenstein, “Particle number fluctuations in relativistic Bose and Fermi gases,” *Phys. Rev.* **C73** (2006) 054904, [arXiv:nucl-th/0510022](https://arxiv.org/abs/nucl-th/0510022).
- [8] V. V. Begun, M. I. Gorenstein, M. Hauer, V. P. Konchakovski, and O. S. Zozulya, “Multiplicity Fluctuations in Hadron-Resonance Gas,” *Phys. Rev.* **C74** (2006) 044903, [arXiv:hep-ph/0606036](https://arxiv.org/abs/hep-ph/0606036).
- [9] A. K. Belyaev, V. K. Ivanov, R. G. Polozkov, A. V. Solov’ov, and A. S. Tiukanov, “Photoabsorption of Fullerene Ions C_{60}^+ and C_{60}^{++} ,” in *Proceedings of the XI-th European Workshop on Quantum Systems in Chemistry and Physics*, St. Petersburg, Russia. 2006.
- [10] R. Berger and J. L. Stuber, “Electroweak quantum chemistry: Do it Breit!,” in *Recent Progress in Computational Sciences and Engineering*, T. Simos and G. Maroulis, eds., vol. 7 of *Lecture Series on Computer and Computational Sciences*, pp. 858–864. Brill academic publishers, 2006.
- [11] B. Betz, M. Bleicher, U. Harbach, T. Humanic, B. Koch, and H. Stöcker, “Mini Black Holes at the LHC: Discovery Through Di-Jet Suppression, Mono-Jet Emission and a Supersonic Boom in the Quark-Gluon Plasma in ALICE, ATLAS and CMS,” in *Proc. of the 22nd Winter Workshop on Nuclear Dynamics*, La Jolla, California, 11-19 March 2006, vol. 32 of *J. Phys. G: Nucl. Part. Phys.*, pp. S429–S438. 2006. [arXiv:hep-ph/0606193](https://arxiv.org/abs/hep-ph/0606193).

- [12] T. Beyer and M. Meyer-Hermann, “The treatment of non-flippable configurations in three dimensional regular triangulations,” *WSEAS Transactions on Systems* **5** (2006) 1100–1107.
- [13] J. Biederlack, M. Castelo-Branco, S. Neuenschwander, D. Wheeler, W. Singer, and D. Nikolić, “Brightness induction: Rate enhancement and neuronal synchronization as complementary codes,” *Neuron* **52** (2006) 1073–1083, [[Download](#)].
- [14] A. S. Botvina and I. N. Mishustin, “Statistical description of nuclear break-up,” in *Dynamics and Thermodynamics with Nuclear Degrees of Freedom*, P. Chomaz, F. Gulminelli, W. Trautmann, and S. Yennello, eds., vol. A30 of *Eur. Phys. Journ.*, pp. 121–128. 2006. [arXiv:nucl-th/0510081](#).
- [15] A. S. Botvina, N. Buyukcizmeci, M. Erdogan, J. Lukasik, I. N. Mishustin, R. Ogul, and W. Trautmann, “Modification of surface energy in nuclear multifragmentation,” *Phys. Rev. C* **74** (2006) 044609, [arXiv:nucl-th/0606060](#).
- [16] A. S. Botvina, I. N. Mishustin, and W. Trautmann, “Properties of stellar matter in supernova explosions and nuclear multifragmentation.” Talk given at International Conference on Nucleus-Nucleus Collisions, Rio de Janeiro, Brazil, 28 Aug - 1 Sep 2006. [arXiv:nucl-th/0612055](#).
- [17] T. J. Bürvenich, J. Evers, and C. H. Keitel, “Dynamic nuclear Stark shift in superintense laser fields,” *Phys. Rev. C* **74** (2006) 044601, [arXiv:nucl-th/0606035](#).
- [18] T. J. Bürvenich, J. Evers, and C. Keitel, “Nuclear quantum optics with X-ray laser pulses,” *Phys. Rev. Lett.* **96** (2006) 142501, [arXiv:nucl-th/0601077](#).
- [19] N. Butko and J. Triesch, “Exploring the role of intrinsic plasticity for the learning of sensory representations,” in *Proc. of the 14th European Symposium on Artificial Neural Networks ESANN2006*, Bruges, Belgium, 26-28 April 2006, pp. 467–472. 2006.
- [20] L. Carlén, P. Golubev, B. Jakobsson, V. Avdeichikov, C. Ekström, C.-J. Fridén, A. Kolozhvari, L. Westerberg, A. Siwek, K. Aleklett, H. Persson, C. Rouki, A. S. Botvina, J. Bondorf, I. A. Pshenichnov, and I. N. Mishustin, “Dynamical and statistical fragment emission properties in 200 A MeV $^{20}\text{Ne}+^{40}\text{Ar}$ collisions,” *Nucl. Phys.* **A764** (2006) 15–23.
- [21] A. Dumitru, L. Portugal, and D. Zschiesche, “Inhomogeneous freeze-out in relativistic heavy-ion collisions,” *Phys. Rev. C* **73** (2006) 024902.
- [22] Z. A. Dupré and T. J. Bürvenich, “Predictions of alpha-decay half-lives based on potentials from self-consistent mean-field models,” *Nucl. Phys.* **A767** (2006) 81–91, [arXiv:nucl-th/0512041](#).
- [23] C. Eckes, J. Triesch, and C. v. d. Malsburg, “Analysis of Cluttered Scenes Using an Elastic Matching Approach for Stereo Images,” *Neural Computation* **18** (2006) 1441–1471.
- [24] M. T. Figge and M. Meyer-Hermann, “Geometrically repatterned immunological synapses uncover formation mechanisms,” *PLoS Computational Biology* **2** (2006) 1377–1384.

- [25] R. V. Florian and R. C. Mureşan, “Phase precession and recession with STDP and anti-STDP,” in *Proc. of the 16th International Conference “Artificial Neural Networks” ICANN 2006*, Athens, Greece, 10-14 Sept. 2006, vol. 4131 of *Lecture Notes in Computer Science Volume*, pp. 718–727. Springer, 2006.
- [26] A. A. Fokin, P. R. Schreiner, R. Berger, G. H. Robinson, P. Wei, and C. F. Campana, “Pseudotetrahedral Polyhalocubanes: Synthesis, Structures, and Parity Violating Energy Differences,” *J. Am. Chem. Soc.* **128** (2006) 5332–5333.
- [27] M. Gazdzicki and M. Gorenstein, “Transparency, Mixing and Reflection of Initial Flows in Relativistic Nuclear Collisions,” *Phys. Lett.* **B640** (2006) 155–161, [arXiv:hep-ph/0511058](https://arxiv.org/abs/hep-ph/0511058).
- [28] R. A. Gherghescu, W. Greiner, and S. Hofmann, “Potential energy surfaces and penetrabilities for sub-barrier synthesis of $Z = 118$ isotopes,” *Eur. Phys. J.* **A27** (2006) 23–32.
- [29] R. A. Gherghescu, D. N. Poenaru, W. Greiner, and Y. Nagame, “Synthesis of $^{286}114$ and $^{290}114$ using low-energy fusion channels,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) L73–L84.
- [30] R. A. G. D. N. Poenaru and W. Greiner, “Colinear Spherical Three Center Shell Model,” in *Twenty Fifth International Workshop on Nuclear Theory*, Rila Mountains, Bulgaria, 26 Jun.-1 Jul. 2006. 2006. [[Download](#)].
- [31] E. V. Gorbar, M. Hashimoto, V. A. Miransky, and I. A. Shovkovy, “Collective excitations, instabilities, and ground state in dense quark matter,” *Phys. Rev.* **D73** (2006) 111502, [arXiv:hep-ph/0602251](https://arxiv.org/abs/hep-ph/0602251).
- [32] W. Greiner, “In memory of David Allan Bromley,” in *Memorial Symposium in Honor of D. Allan Bromley - Nuclear Scientists and Policy Innovator*, Yale Univ., New Haven, CT, 08-09 Dec. 2005. World Scientific, 2006.
- [33] W. Greiner, “Structure of Vacuum, Matter and Antimatter: A Mechanism for Cold Compression,” in *Proc. of the 5th Intl. Conference on Physics and Astrophysics of Quark Gluon Plasma*, Salt Lake City, Kolkata, India, 8-12 Feb. 2005, vol. 50 of *J. Phys.: Conf. Ser.*, pp. 201–207. 2006.
- [34] W. Greiner and V. Zagrebaev, “Fusion-Fission for Superheavy ($Z=110-126$) and Super-Superheavy ($Z=160-180$) Nuclear Systems,” in *International Conference on Reaction Mechanisms and Nuclear Structure Coulomb Barrier*, Venice, Italy, 19-23 March 2006, vol. 853 of *AIP Conf. Proc.*, pp. 245–252. 2006.
- [35] W. Greiner and V. Zagrebaev, “Long-Lived Superheavy Nuclei and Giant Quasi-Atoms Produced in Damped Collisions of Transactinides,” in *Proc. Asia-Pacific Symposium on Radiochemistry, APSORC2005*, Beijing, China, 17-21 Oct. 2005, vol. 7 of *Journal of Nuclear and Radiochemical Sciences*, pp. R1–R5. 2006. [[Download](#)].
- [36] K. A. Gridnev, D. K. Gridnev, V. G. Kartavenko, V. E. Mitroshin, V. N. Tarasov, D. V. Tarasov, and W. Greiner, “On stability of the neutron-rich oxygen isotopes,” *Int. J. Mod. Phys.* **E15** (2006) 673–683.

- [37] K. A. Gridnev, D. K. Gridnev, V. G. Kartavenko, V. E. Mitroshin, V. N. Tarasov, D. V. Tarasov, and W. Greiner, “Specific features of the nuclear drip line in the region of light nuclei,” *Physics of Atomic Nuclei* **69** (2006) 1–5.
- [38] R. K. Gupta, M. Balasubramaniam, R. Kumar, D. Singh, S. K. Arun, and W. Greiner, “The dynamical cluster-decay model of preformed clusters for hot and rotating $^{116}\text{Ba}^*$ nucleus produced in low-energy $^{58}\text{Ni}+^{58}\text{Ni}$ reaction,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 345–361.
- [39] R. K. Gupta, M. Balasubramaniam, S. Kumar, S. K. Patra, G. Münzenberg, and W. Greiner, “Magic numbers in exotic light nuclei near drip lines,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 565–571.
- [40] R. K. Gupta, M. Manhas, and W. Greiner, “Compactness of the ^{48}Ca induced hot fusion reactions and the magnitudes of quadrupole and hexadecupole deformations,” *Phys. Rev.* **C73** (2006) 054307.
- [41] V. P. Gusynin, V. A. Miransky, S. G. Sharapov, and I. A. Shovkovy, “Excitonic gap, phase transition, and quantum Hall effect in graphene,” *Phys. Rev.* **B74** (2006) 195429, [arXiv:cond-mat/0605348](https://arxiv.org/abs/cond-mat/0605348).
- [42] U. Harbach and M. Bleicher, “No Black Holes at IceCube.” 2006. [arXiv:hep-ph/0601121](https://arxiv.org/abs/hep-ph/0601121).
- [43] U. Harbach and S. Hossenfelder, “The Casimir effect in the presence of a minimal length,” *Phys. Lett.* **B632** (2006) 379–383, [arXiv:hep-th/0502142](https://arxiv.org/abs/hep-th/0502142).
- [44] U. Harbach and S. Hossenfelder, “Modification of the Casimir effect due to a minimal length scale,” in *20th Lake Louise Winter Institute: Fundamental Interactions*, A. Astbury, B. Campbell, M. Vincter, F. Khanna, and R. Moore, eds., Lake Louise, Alberta, Canada, 20-26 Feb. 2005, Fundamental Interactions. Proceedings of the 20th Lake Louise Winter Institute, pp. 164–168. World Scientific, 2006. [arXiv:hep-th/0505010](https://arxiv.org/abs/hep-th/0505010).
- [45] S. Haussler, M. Abdel-Aziz, and M. Bleicher, “Effect of rescattering on forward-backward correlations,” in *2nd Cairo International Conference on High Energy Physics (CICHEP 2)*, Cairo, Egypt, 14-17 Jan. 2006. 2006. [arXiv:nucl-th/0608075](https://arxiv.org/abs/nucl-th/0608075).
- [46] S. Haussler, H. Stöcker, and M. Bleicher, “Event-by-event analysis of baryon-strangeness correlations: Pinning Down the critical temperature and volume of quark-gluon-plasma formation,” *Phys. Rev.* **C73** (2006) 021901.
- [47] B. Hess, C. Holm, and N. van der Vegt, “Modeling multibody effects in ionic solutions with a concentration dependent dielectric permittivity,” *Phys. Rev. Lett.* **96** (2006) 147801.
- [48] B. Hess, C. Holm, and N. van der Vegt, “Osmotic Coefficients of atomistic NaCl (aq) force-fields,” *J. Chem. Phys.* **124** (2006) 164509.
- [49] C. Holm, A. Ivanov, S. Kantorovich, and E. Pyanzina, “Polydispersity influence upon magnetic properties of aggregated ferrofluids,” in *88th International Bunsen Discussion Meeting/6th German Ferrofluid Workshop Saarbrücken, Germany, 2005*, vol. 220 of *Zeitschrift für Physikalische Chemie*, pp. 105–115. 2006.

- [50] C. Holm, A. Ivanov, S. Kantorovich, E. Pyanzina, and E. Reznikov, “Equilibrium properties of a bidisperse ferrofluid with chain aggregates: theory and computer simulations,” *J. Phys.: Condens. Matter* **18** (2006) S2737–S2756.
- [51] H. Jasso and J. Triesch, “Using Eye Direction Cues for Gaze Following - A Developmental Model,” in *Proc. of the Fifth Int. Conf. on Development and Learning (ICDL '06)*, Bloomington, Indiana, 31 May-3 June 2006. 2006. [[Download](#)].
- [52] H. Kim, E. Murphy-Chutorian, and J. Triesch, “Semi-autonomous learning of objects,” in *IEEE Conference on Computer Vision and Pattern Recognition Workshop CVPRW2006*, pp. 145–150. 2006. [[Download](#)].
- [53] O. Kiriya, D. H. Rischke, and I. A. Shovkovy, “Gluonic phase versus LOFF phase in two-flavor quark matter,” *Phys. Lett.* **B643** (2006) 331–335, [arXiv:hep-ph/0606030](#).
- [54] M. Kitazawa, D. H. Rischke, and I. A. Shovkovy, “Stable gapless superconductivity at strong coupling,” *Phys. Lett.* **B637** (2006) 367–373, [arXiv:hep-ph/0602065](#).
- [55] B. Koch, H.-J. Drescher, and M. Bleicher, “Gravitational Radiation from Ultra High Energy Cosmic Rays in Models with Large Extra Dimensions,” *Astropart. Phys.* **25** (2006) 291–297, [arXiv:astro-ph/0602164](#).
- [56] V. P. Konchakovski, M. I. Gorenstein, E. L. Bratkovskaya, and H. Stöcker, “Baryon number and electric charge fluctuations in Pb+Pb collisions at relativistic energies,” *Phys. Rev.* **C74** (2006) 064911, [arXiv:nucl-th/0606047](#).
- [57] V. P. Konchakovski, S. Haussler, M. I. Gorenstein, E. L. Bratkovskaya, M. Bleicher, and H. Stöcker, “Particle number fluctuations in high energy nucleus nucleus collisions from microscopic transport approaches,” *Phys. Rev.* **C73** (2006) 034902, [arXiv:nucl-th/0511083](#).
- [58] A. V. Korol, “Surface and volume plasmons in fullerenes, nano-particles and thin films,” in *Summer School Theoretical and computational methods in Meso-Bio-Nano-Science, FIAS, Frankfurt*, A. V. Solov’yov, ed., pp. 147–178. 2006.
- [59] A. V. Korol, A. V. Solov’yov, and W. Greiner, “Spontaneous and Stimulated Photon Emission in Crystalline Undulators,” in *Proceedings of the NATO Advanced Research Workshop “Advanced Photon Sources and Applications”*, H. Wiedemann, ed., Nor-Hamberd, Armenia, 29 Aug.-2 Sept. 2004, vol. 199 of *NATO Science Series II: Mathematics, Physics and Chemistry*, pp. 165–189. Kluwer Academic Publishers, 2006.
- [60] A. V. Korol and I. A. Solov’yov, “Relativistic two-photon bremsstrahlung,” *Radiation Physics and Chemistry* **75** (2006) 1346–1357.
- [61] A. V. Korol and A. V. Solov’yov, “Relativistic effects in polarizational bremsstrahlung,” *Radiation Physics and Chemistry* **75** (2006) 1251–1265, [arXiv:physics/0412104](#).
- [62] A. V. Korol and A. V. Solov’yov, “Polarizational bremsstrahlung in non-relativistic collisions,” *Radiation Physics and Chemistry* **75** (2006) 1266–1286, [arXiv:physics/0412103](#).

- [63] W. Krause, J. Scholz, and M. Greiner, “Optimized network structure and routing metric in wireless multihop ad hoc communication,” *Physica* **A361** (2006) 707–723, [arXiv:cs.NI/0503010](#).
- [64] G. Laubender and R. Berger, “Electroweak quantum chemistry for nuclear-magnetic-resonance-shielding constants: Impact of electron correlation,” *Phys. Rev.* **A74** (2006) 032105.
- [65] A. Lazar, G. Pipa, and J. Triesch, “The combination of STDP and intrinsic plasticity yields complex dynamics in recurrent spiking networks,” in *Proc. of the 14th European Symposium on Artificial Neural Networks ESANN2006*, Bruges, Belgium, 26-28 April 2006, pp. 647–652. 2006. [% tt \[Download\]](#).
- [66] Q. Li, M. Bleicher, and H. Stöcker, “Transport model analysis of particle correlations in relativistic heavy ion collisions at femtometer scales,” *Phys. Rev.* **C73** (2006) 064908, [arXiv:nucl-th/0602032](#).
- [67] Q. Li, Z. Li, S. Soff, M. Bleicher, and H. Stöcker, “Medium modifications of the nucleon-nucleon elastic cross section in neutron-rich intermediate energy HICs,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 407–416, [arXiv:nucl-th/0601047](#).
- [68] Q. Li, Z. x. Li, S. Soff, M. Bleicher, and H. Stöcker, “Probing the equation of state with pions,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 151–164, [arXiv:nucl-th/0509070](#).
- [69] Q. Li, Z. Li, and H. Stöcker, “Probing the symmetry energy and the degree of isospin equilibrium,” *Phys. Rev.* **C73** (2006) 051601, [arXiv:nucl-th/0603050](#).
- [70] H. J. Limbach, A. Arnold, B. A. Mann, and C. Holm, “ESPResSo – An Extensible Simulation Package for Research on Soft Matter Systems,” *Comp. Phys. Comm.* **174** (2006) 704–727.
- [71] W. fei Li, N. Wang, F. Jia, H. Xu, W. Zuo, Q. Li, E. Zhao, J. Li, and W. Scheid, “Particle transfer and fusion cross-section for super-heavy nuclei in dinuclear system,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 1143–1156, [arXiv:nucl-th/0509053](#).
- [72] Y. Lu, M. Bleicher, F. Liu, Z. Liu, H. Petersen, P. Sorensen, H. Stöcker, N. Xu, and X. Zhu, “Anisotropic flow at RHIC: How unique is the number-of-constituent-quark scaling?,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 1121–1129, [arXiv:nucl-th/0602009](#).
- [73] J. Lücke and C. v. d. Malsburg, “Rapid correspondence finding in networks of cortical columns,” in *Proc. of the 16th International Conference “Artificial Neural Networks” ICANN 2006*, Athens, Greece, 10-14 Sept. 2006, vol. 4131 of *Lecture Notes in Computer Science*, pp. 668–677. Springer, 2006. [\[Download\]](#).
- [74] A. Lyalin, O. I. Obolensky, A. V. Solov’yov, and W. Greiner, “Fission of metal clusters,” *Int. J. Mod. Phys.* **E15** (2006) 153–195.
- [75] A. G. Lyalin and A. V. Solov’yov, “Polarizational bremsstrahlung from atomic clusters,” *Radiation Physics and Chemistry* **75** (2006) 1358–1379.

- [76] A. Lyalin, A. V. Solov'yov, and W. Greiner, "Structure and magnetism of lanthanum clusters," *Phys. Rev.* **A74** (2006) 043201.
- [77] V. Magas, L. P. Csernai, and E. Molnar, "Bjorken hydrodynamics and gradual freeze out," in *Proc. of the 3rd Intl. Workshop "The Critical Point and Onset of Deconfinement"*, Florence, Italy, 3-6 July 2006, vol. PoS (CPOD2006) of *Proceedings of Science*, p. 031. 2006. [[Download](#)].
- [78] H. Malekzadeh, "Fate of the inert three-flavor, spin-zero color-superconducting phases," *Phys. Rev.* **D74** (2006) 065011, [arXiv:hep-ph/0604260](#).
- [79] H. Malekzadeh and D. H. Rischke, "Gluon self-energy in the color-flavor-locked phase," *Phys. Rev.* **D73** (2006) 114006, [arXiv:hep-ph/0602082](#).
- [80] M. Manhas, R. K. Gupta, Q. Li, S. K. Patra, and W. Greiner, "Higher-multipole deformations and compactness of hot fusion reactions," *Phys. Rev.* **C74** (2006) 034603.
- [81] B. A. Mann, K. Kremer, and C. Holm, "The swelling behaviour of charged hydrogels," in *5th International Symposium on Molecular Mobility and Order in Polymer Systems*, St Petersburg, Russia, 20-24 June 2005, vol. 237 of *Macromolecular Symposia*, pp. 90–107. 2006.
- [82] M. S. Mehta, B. K. Sharma, S. K. Patra, R. K. Gupta, and W. Greiner, "Decrease of the spin-orbit interaction in drip-line nuclei, using relativistic mean field models," *Int. J. Mod. Phys.* **E15** (2006) 1149–1155.
- [83] M. Meyer-Hermann, P. Maini, and D. Iber, "An analysis of B cell selection mechanisms in germinal centers," *Math. Med. Biol.* **23** (2006) 255–277, [arXiv:q-bio/0611046](#).
- [84] A. Mishra and H. Mishra, "Color superconductivity with determinant interaction in strange quark matter," *Phys. Rev.* **D74** (2006) 054024, [arXiv:hep-ph/0605223](#).
- [85] I. N. Mishustin, "Possible links between the liquid-gas and deconfinement-hadronization phase transitions," *Eur. Phys. J.* **A30** (2006) 311–316, [arXiv:hep-ph/0609196](#).
- [86] I. Mishustin, "Fluctuations near the deconfinement phase transition boundary," in *Nuclear Science and Safety in Europe*, NATO Security through Science Series, pp. 99–111. Springer Netherlands, 2006.
- [87] I. N. Mishustin, L. M. Satarov, and W. Greiner, "Possible glueball production in relativistic heavy-ion collisions," *J. Phys. G: Nucl. Part. Phys.* **32** (2006) L59–L63, [arXiv:hep-ph/0606251](#).
- [88] A. Mocsy, "Heavy quark correlators above deconfinement," in *18th International Conference on Ultrarelativistic Nucleus-Nucleus Collisions: Quark Matter 2005 (QM2005)*, Budapest, Hungary, 4-9 Aug. 2005, vol. A774 of *Nucl. Phys.*, pp. 885–888. 2006. [arXiv:hep-ph/0510135](#).
- [89] A. Mocsy and P. Petreczky, "Quarkonia correlators above deconfinement," *Phys. Rev.* **D73** (2006) 074007, [arXiv:nucl-th/0512156](#).

- [90] F. Mühlbacher, C. Holm, and H. Schiessel, “Controlled DNA compaction within chromatin: The tail-bridging effect,” *Europhys. Lett.* **73** (2006) 135–141, [arXiv:q-bio/0503007](https://arxiv.org/abs/q-bio/0503007).
- [91] F. Mühlbacher, H. Schiessel, and C. Holm, “Tail-induced attraction between nucleosome core particles,” *Phys. Rev.* **E74** (2006) 031919.
- [92] G. Narain, J. Schaffner-Bielich, and I. N. Mishustin, “Compact stars made of fermionic dark matter,” *Phys. Rev.* **D74** (2006) 063003, [arXiv:astro-ph/0605724](https://arxiv.org/abs/astro-ph/0605724).
- [93] J. L. Noronha, H. c. Ren, I. Giannakis, D. Hou, and D. H. Rischke, “Effect of gauge-field fluctuations on the phase transition between normal and color-superconducting quark matter,” in *18th International Conference on Ultrarelativistic Nucleus-Nucleus Collisions: Quark Matter 2005 (QM2005)*, Budapest, Hungary, 4-9 Aug. 2005, vol. A27 of *Acta Phys. Hung.*, pp. 311–314. 2006. [arXiv:nucl-th/0511047](https://arxiv.org/abs/nucl-th/0511047).
- [94] J. L. Noronha, H. c. Ren, I. Giannakis, D. Hou, and D. H. Rischke, “Absence of the London limit for the first-order phase transition to a color superconductor,” *Phy. Rev.* **D73** (2006) 094009, [arXiv:hep-ph/0602218](https://arxiv.org/abs/hep-ph/0602218).
- [95] H. Petersen and M. Bleicher, “Longitudinal flow and onset of deconfinement,” in *Proc. of the 3rd Intl. Workshop “The Critical Point and Onset of Deconfinement”*, Florence, Italy, 3-6 July 2006, vol. PoS (CPOD2006) of *Proceedings of Science*, p. 025. 2006. [arXiv:nucl-th/0611001](https://arxiv.org/abs/nucl-th/0611001).
- [96] H. Petersen, Q. Li, X. Zhu, and M. Bleicher, “Directed and elliptic flow in heavy ion collisions at GSI-FAIR and CERN-SPS,” *Phys. Rev.* **C74** (2006) 044908, [arXiv:hep-ph/0608189](https://arxiv.org/abs/hep-ph/0608189).
- [97] R. Pisarski, “Chasing the Unicorn: RHIC and the QGP,” in *25th Brazilian Meeting of Particle Physics and Fields*, Caxambu, Minas Gerais, Brazil, 24-27 Aug. 2004, vol. 36 of *Brazilian Journal of Physics*, pp. 122–131. 2006. [[Download](#)].
- [98] D. N. Poenaru, “Proca Equations of a Massive Vector Boson Field,” in *Twenty Fifth International Workshop on Nuclear Theory*, Rila Mountains, Bulgaria, 26 Jun.-1 Jul. 2006. 2006. [[Download](#)].
- [99] D. N. Poenaru and A. Calboreanu, “Alexandru Proca (1897-1955) and his equation of the massive vector boson field,” *Europhysics News* **37** (2006) 24–26.
- [100] D. N. Poenaru, R. A. Gherghescu, and W. Greiner, “Fission valleys and heavy ion decay modes,” in *Proc. of the Carpathian Summer School “Exotic Nuclei and Nuclear/Particle Astrophysics”*, S. Stoica, L. Trache, and R. Tribble, eds., Mamaia, Romania, 13-24 June 2005, pp. 152–159. World Scientific, 2006.
- [101] D. N. Poenaru, R. A. Gherghescu, and W. Greiner, “Potential energy surfaces for cluster emitting nuclei,” *Phys. Rev.* **C73** (2006) 014608, [arXiv:nucl-th/0509073](https://arxiv.org/abs/nucl-th/0509073).
- [102] D. N. Poenaru, I. H. Plonski, R. A. Gherghescu, and W. Greiner, “Valleys due to Pb and Sn on potential energy surfaces of superheavy and lighter α emitting nuclei,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 1223–1239.

- [103] D. N. Poenaru, I. H. Plonski, and W. Greiner, “ α -decay half-lives of superheavy nuclei,” *Phys. Rev.* **C74** (2006) 014312.
- [104] I. Pshenichnov, I. Mishustin, and W. Greiner, “Distributions of positron-emitting nuclei in proton and carbon-ion therapy studied with GEANT4,” *Phys. Med. Biol.* **51** (2006) 6099–6112, [arXiv:physics/0608017](https://arxiv.org/abs/physics/0608017).
- [105] D. Röder, J. Ruppert, and D. H. Rischke, “Self-consistent calculations of spectral densities in the O(N) model: improving the Hartree-Fock approximation by including nonzero decay widths,” *Nucl. Phys.* **A775** (2006) 127–151, [arXiv:hep-ph/0503042](https://arxiv.org/abs/hep-ph/0503042).
- [106] J. Roithova, D. Schröder, R. Berger, and H. Schwarz, “Doubly protonated benzene in the gas phase,” *J. Phys. Chem.* **A110** (2006) 1650–1657.
- [107] R. J. Rosychuk, X. Sheng, and J. L. Stuber, “Comparison of variance estimation approaches in a two-state Markov model for longitudinal data with misclassification,” *Statistics in Medicine* **25** (2006) 1906–1921.
- [108] S. B. Rüster, V. Werth, M. Buballa, I. A. Shovkovy, and D. H. Rischke, “The phase diagram of neutral quark matter: The effect of neutrino trapping,” *Phys. Rev.* **D73** (2006) 034025, [arXiv:hep-ph/0509073](https://arxiv.org/abs/hep-ph/0509073).
- [109] S. B. Rüster, V. Werth, M. Buballa, I. A. Shovkovy, and D. H. Rischke, “Phase diagram of neutral quark matter at moderate densities,” in *Pairing in Fermionic Systems: Basic Concepts and Modern Applications; INT Workshop on Pairing in Fermionic Systems: Beyond the BCS Theory*, A. Sedrakian, J. W. Clark, and M. Alford, eds., Seattle, Washington, 19-23 Sept. 2005. World Scientific, 2006. [arXiv:nucl-th/0602018](https://arxiv.org/abs/nucl-th/0602018).
- [110] M. Schäfer, J. Scholz, and M. Greiner, “Proactive robustness control of heterogeneously loaded networks,” *Phys. Rev. Lett.* **96** (2006) 108701.
- [111] G. Schaller and M. Meyer-Hermann, “Continuum versus discrete model: A comparison for multicellular tumour spheroids,” *Philos. Trans. Roy. Soc.* **A364** (2006) 1443–1464.
- [112] B. Schenke, M. Strickland, C. Greiner, and M. H. Thoma, “A Model of the effect of collisions on QCD plasma instabilities,” *Phys. Rev.* **D73** (2006) 125004, [arXiv:hep-ph/0603029](https://arxiv.org/abs/hep-ph/0603029).
- [113] B. Schenke and M. Strickland, “Fermionic Collective Modes of an Anisotropic Quark-Gluon Plasma,” *Phys. Rev.* **D74** (2006) 065004, [arXiv:hep-ph/0606160](https://arxiv.org/abs/hep-ph/0606160).
- [114] A. Schmitt, I. A. Shovkovy, and Q. Wang, “Cooling Rates of Anisotropic Color Superconductors,” *Acta Phys. Hung.* **A27** (2006) 319–322.
- [115] A. Schmitt, I. A. Shovkovy, and Q. Wang, “Asymmetric neutrino emission from spin-1 color superconductor,” in *International Workshop on QCD: QCD@Work 2005*, Conversano, Italy, 16-20 June 2005, vol. 806 of *AIP Conf. Proc.*, pp. 310–316. 2006.
- [116] A. Schmitt, I. A. Shovkovy, and Q. Wang, “Neutrino emissivity from spin-one color superconductors,” in *29th Johns Hopkins Workshop in Theoretical Physics: Strong Matter in the Heavens*, Budapest, Hungary, 1-3 Aug. 2005, vol. PoS (JHW2005) of *Proceedings of Science*, p. 028. 2006. [[Download](#)].

- [117] A. Schmitt, I. A. Shovkovy, and Q. Wang, “Neutrino emission and cooling rates of spin-one color superconductors,” *Phys. Rev.* **D73** (2006) 034012, [arXiv:hep-ph/0510347](#).
- [118] G. Schneider, M. N. Havenith, and D. Nikolić, “Spatiotemporal structure in large neuronal networks detected from cross correlation,” *Neural Computation* **18** (2006) 2387–2413, [[Download](#)].
- [119] G. Schneider and D. Nikolić, “Detection and assessment of near-zero delays in neuronal spiking activity,” *Journal of Neuroscience Methods* **152** (2006) 97–106, [[Download](#)].
- [120] B. K. Sharma, P. Arumugam, S. K. Patra, P. D. Stevenson, R. K. Gupta, , and W. Greiner, “Clustering in superheavy nuclei within the relativistic mean field approach,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) L1–L9.
- [121] B. K. Sharma, S. K. Patra, R. K. Gupta, A. Shukla, P. Arumugam, P. D. Stevenson, and W. Greiner, “Reaction cross-sections for light nuclei on ^{12}C using relativistic mean field formalism,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 2089–2097.
- [122] B. Singh, M. K. Sharma, R. K. Gupta, and W. Greiner, “Entrance-channel effects in the dynamical cluster-decay model for the decay of hot and rotating compound nucleus Cr-48 at $E^*(\text{CN})$ approx. 60-MeV,” *Int. J. Mod. Phys.* **E15** (2006) 699–717.
- [123] A. V. Solov’yov, “Collective excitations in collisions of photons, electrons with metal clusters, fullerenes,” in *XXIV International Conference on Photonic, Electronic, Atomic Collisions XXIV ICPEAC*, P. D. Fainstein, M. A. P. Lima, J. E. Miraglia, E. C. Montenegro, and R. D. Rivarola, eds., Rosario, Argentina, 20–26 July 2005, pp. 615–624. World Scientific, 2006.
- [124] A. V. Solov’yov, V. K. Ivanov, and R. G. Polozkov, “Electron-positron quantum droplets,” *Eur. Phys. J.* **D40** (2006) 313–316.
- [125] I. A. Solov’yov, A. V. Solov’yov, and W. Greiner, “Cluster Fusion Algorithm: Application to Lennard-Jones Clusters,” in *Chemical Physics: New Research*, A. Linke, ed., pp. 89–127. Nova Science Publishers, 2006. [[Download](#)].
- [126] I. A. Solov’yov, A. V. Yakubovich, A. V. Solov’yov, and W. Greiner, “Potential energy surface of alanine polypeptide chains,” *Journal of Experimental and Theoretical Physics* **102** (2006) 314–326.
- [127] I. A. Solov’yov, A. V. Yakubovich, A. V. Solov’yov, and W. Greiner, “On the fragmentation of biomolecules: Fragmentation of alanine dipeptide along the polypeptide chain,” *Journal of Experimental and Theoretical Physics* **103** (2006) 463–471.
- [128] I. A. Solov’yov, A. V. Yakubovich, A. V. Solov’yov, and W. Greiner, “Ab initio study of alanine polypeptide chain twisting,” *Phys. Rev.* **E73** (2006) 021916, [arXiv:physics/0511036](#).
- [129] H. Stöcker, “Mini black holes in the first year of the LHC: Discovery through di-jet suppression, multiple mono-jet emission and ionizing tracks in ALICE,” in *International Conference on Strangeness in Quark Matter SQM2006*, Los Angeles, 26–31 March 2006, vol. 32 of *J. Phys. G: Nucl. Part. Phys.*, pp. S429–S438. 2006.

- [130] H. Stöcker, “Summary of theoretical contributions,” in *Proc. of the 5th Intl. Conference on Physics and Astrophysics of Quark Gluon Plasma*, Salt Lake City, Kolkata, India, 8-12 Feb. 2005, vol. 50 of *J. Phys.: Conf. Ser.*, pp. 300–310. 2006.
[arXiv:nucl-th/0506013](https://arxiv.org/abs/nucl-th/0506013). Summary talk.
- [131] H. Stöcker, B. Betz, and P. Rau, “Hydrodynamic Flow and Jet Induced Mach Shocks at RHIC and LHC,” in *Proc. of the 3rd Intl. Workshop “The Critical Point and Onset of Deconfinement”*, Florence, Italy, vol. PoS (CPOD2006) of *Proceedings of Science*, p. 029. 2006. [arXiv:nucl-th/0703054](https://arxiv.org/abs/nucl-th/0703054).
- [132] M. Strickland, “Visualizing Color Plasma Instabilities,” *Eur. Phys. J. A* **29** (2006) 59–63, [arXiv:hep-ph/0511212](https://arxiv.org/abs/hep-ph/0511212).
- [133] M. R. Stukan, V. A. Lobaskin, C. Holm, and O. I. Vinogradova, “Spatial distribution of polyelectrolyte and counterions in nanocapsules: A computer simulation study,” *Phys. Rev. E* **73** (2006) 021801.
- [134] C. M. Thiele, A. Marx, R. Berger, J. Fischer, M. Biel, and A. Giannis, “Determination of the relative configuration of a five-membered lactone from residual dipolar couplings,” *Angew. Chem. Int. Ed.* **45** (2006) 4455–4460. In German: Bestimmung der relativen Konfiguration eines Fünfring-Lactons aus dipolaren Restkopplungen, *Angew. Chem.* 118 (2006) 4566–4571.
- [135] L. Tolos, D. Cabrera, A. Ramos, and A. Polls, “The effect of the in-medium Θ^+ pentaquark on the kaon optical potential,” *Phys. Lett. B* **632** (2006) 219–225, [arXiv:hep-ph/0503009](https://arxiv.org/abs/hep-ph/0503009).
- [136] L. Tolos, J. Schaffner-Bielich, and H. Stöcker, “D-mesons: In-medium effects at FAIR,” *Phys. Lett. B* **635** (2006) 85–92, [arXiv:nucl-th/0509054](https://arxiv.org/abs/nucl-th/0509054).
- [137] L. Tolos, J. Schaffner-Bielich, and H. Stöcker, “Open-charm enhancement at FAIR?,” in *International Conference on Strangeness in Quark Matter SQM2006*, Los Angeles, 26-31 March 2006, vol. 32 of *J. Phys. G: Nucl. Part. Phys.*, pp. S533–S536. 2006.
[arXiv:nucl-th/0605035](https://arxiv.org/abs/nucl-th/0605035).
- [138] J. Triesch, “Modeling the emergence of gaze following,” *KI - Zeitschrift für Künstliche Intelligenz* **3/2006** (2006) 27–30.
- [139] J. Triesch, C. Teuscher, G. O. Deák, and E. Carlson, “Commentary: Gaze following: Why (not) learn it?,” *Developmental Science* **9** (2006) 125–147.
- [140] J. Triesch, C. Teuscher, and G. O. Dák, “Gaze following: How (not) to derive predictions from a computational model,” *Developmental Science* **9** (2006) 156–157.
- [141] S. Tyagi, “Evaluation of Coulomb potential in a triclinic cell with periodic boundary conditions,” *Mol. Phys.* **104** (2006) 2433–2438.
- [142] S. Tyagi, “Logarithmic interaction under periodic boundary conditions: closed form formulas for energy and forces,” *Mol. Phys.* **104** (2006) 359–363, [arXiv:cond-mat/0505686](https://arxiv.org/abs/cond-mat/0505686).

- [143] P. J. Uhlhaas, D. E. J. Linden, W. Singer, C. Haenschel, M. Lindner, K. Maurer, and E. Rodriguez, “Dysfunctional long-range coordination of neural activity during gestalt perception in schizophrenia,” *Journal of Neuroscience* **26** (2006) 8168–8175.
- [144] P. J. Uhlhaas, W. A. Phillips, G. Mitchell, and S. Silverstein, “Perceptual grouping in disorganized schizophrenia,” *Psychiatry Research* **145** (2006) 105–117.
- [145] P. J. Uhlhaas and W. Singer, “Neural Synchrony in Brain Disorders: Relevance for Cognitive Dysfunctions and Pathophysiology,” *Neuron* **52** (2006) 155–168.
- [146] C. Weber and J. Triesch, “A possible representation of reward in the learning of saccades,” in *Proc. of the Sixth International Workshop on Epigenetic Robotics “EpiRob”*, Hopital de la Salpêtrière, Paris, France, 20-22 Sept. 2006, pp. 153–160. 2006. [[Download](#)].
- [147] F. X. Wei, G. J. Mao, C. M. Ko, L. S. Kisslinger, H. Stöcker, and W. Greiner, “Effect of isovector-scalar meson on neutron star matter in strong magnetic fields,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 47–61, [arXiv:nucl-th/0508065](#).
- [148] A. V. Yakubovich, I. A. Solov’yov, A. V. Solov’yov, and W. Greiner, “Phase transition in polypeptides: a step towards the understanding of protein folding,” *Eur. Phys. J.* **D40** (2006) 363–367. (Highlight paper).
- [149] A. V. Yakubovich, I. A. Solov’yov, A. V. Solov’yov, and W. Greiner, “Conformational changes in glycine tri- and hexapeptide,” *Eur. Phys. Journ.* **D39** (2006) 23–34, [arXiv:physics/0511026](#).
- [150] A. V. Yakubovich, I. A. Solov’yov, A. V. Solov’yov, and W. Greiner, “Conformational properties of glycine polypeptides,” *Khimicheskaya Fizika (Chemical Physics) (in Russian)* **25** (2006) 11–23.
- [151] V. Zagrebaev and W. Greiner, “Low-energy fusion-fission dynamics of heavy nuclear systems,” in *Intl. Conference on Reaction Mechanisms and Nuclear Structure Coulomb Barrier*, Venice, Italy, 19-23 March 2006, vol. 853 of *AIP Conf. Proc.*, pp. 323–330. 2006.
- [152] V. I. Zagrebaev, Y. T. Oganessian, M. G. Itkis, and W. Greiner, “Superheavy nuclei and quasi-atoms produced in collisions of transuranium ions,” *Phys. Rev.* **C73** (2006) 031602.
- [153] X. Zhu and M. Bleicher, “Influence of the non-flow effects and fluctuations on the v_2 measurements at RHIC,” in *Proc. of the 18th International Conference on Nucleus-Nucleus-Collisions “Quark Matter 2005”*, Budapest, 4-9 Aug. 2005, vol. 51 of *Nukleonika*, pp. S37–S41. 2006. [[Download](#)].
- [154] X. Zhu, M. Bleicher, and H. Stöcker, “Elliptic Flow Analysis at RHIC with the Lee-Yang Zeroes Method in a Relativistic Transport Approach,” *J. Phys. G: Nucl. Part. Phys.* **32** (2006) 2181–2186, [arXiv:nucl-th/0601049](#).
- [155] X. Zhu, H. Petersen, and M. Bleicher, “Radial and Elliptic Flow in High Energetic Nuclear Collisions,” in *XXXV International Symposium on Multiparticle Dynamics and Workshop on Particle Correlations and Femtoscopy (ISMD 05)*, Kromeriz, Czech Republic, 9-17 Aug. 2005, vol. 828 of *AIP Conf. Proc.*, pp. 17–23. 2006. [arXiv:astro-ph/0612218](#).

- [156] X. Zhu, H. Petersen, and M. Bleicher, “[Elliptic flow and constituent quark scaling from hadron-string transport models,](#)” in *International Conference on Strangeness in Quark Matter SQM2006*, Los Angeles, 26-31 March 2006, vol. 32 of *J. Phys. G: Nucl. Part. Phys.*, pp. S365–S371. 2006.