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LIST OF
PUBLICATIONS

Publications in International Journals

1. *Renormalization group improved black hole space-time in large extra dimensions*
Thomas Burschil, Benjamin Koch;
JETP Lett.**92:4**, 2010;
[arXiv:0912.4517].
2. *Explaining Solar Neutrinos with Heavy Higgs Masses in Partial Split Supersymmetry*
Marco Aurelio Diaz, Benjamin Koch, Francisca Garay;
Phys.Rev.D**80:113005**, 2009;
[arXiv:0918.2987].
3. *Gravity Effects on Neutrino Masses in Split Supersymmetry*
Marco Aurelio Diaz, Benjamin Koch, Boris Panes;
Phys.Rev.D**79:113009**, 2009;
[arXiv:0902.1720].
4. *Exclusion of black hole disaster scenarios at the LHC*
Benjamin Koch, Marcus Bleicher, Horst Stocker;
Phys.Lett.B**672:71-76**, 2009;
[arXiv:0807.3349].
5. *Renormalization group and black hole production in large extra dimensions*
Benjamin Koch;
Phys.Lett.B**663:334-337**, 2008;
[arXiv:0707.4644].
6. *Gravitational radiation from elastic particle scattering in models with extra dimensions*
Benjamin Koch, M. Bleicher;
JETP Lett.**87:75-80**, 2008;
[hep-th/0512353].

7. *First Order Calculation of the Inclusive Cross Section pp to ZZ by Graviton Exchange in Large Extra Dimensions*
Martin Kober, Benjamin Koch, Marcus Bleicher;
Phys.Rev.D76:125001,2007, 2007;
[arXiv:0708.2368].
8. *The Gravitational analogue to the hydrogen atom. A summer study at the borders of quantum mechanics and general relativity*
Martin Kober, Benjamin Koch, Marcus Bleicher;
J-Phys.E.28:465-478, 2007;
[arXiv:physics/0703064].
9. *Gravitational Radiation from Ultrahigh Energy Cosmic Rays in Models with Large Extra Dimensions.*
Benjamin Koch, Hans Joachim Drescher, Marcus Bleicher;
Astropart.Phys.25:291-297, 2006;
[arXiv:astro-ph/0602164].
10. *Black Hole Remnants at the LHC.*
Benjamin Koch, Marcus Bleicher, Sabine Hossenfelder;
JHEP 0510:053, 2005;
[arXiv:hep-ph/0507138].

Publications in Conference Proceedings

11. *Quantizing Geometry or Geometrizing the Quantum?*
Benjamin Koch;
Quantum Theory Reconsideration of Foundations 5;
Vaxjo, Sweden;
AIP Conf.Proc.1232:313-320, 2010.
12. *Geometrizing the Quantum - a toy model*
Benjamin Koch;
13th Max Born Symposium;
Wroclaw, Poland;
AIP Conf.Proc.1196:161, 2009.
13. *Heavy Ion Collisions at the LHC - Last Call for Predictions*
N. Armesto, (ed.) et al.;
Workshop on Heavy Ion Collisions at the LHC: Last Call for Predictions;
Geneva, Switzerland;
J.Phys.G35:054001, 2008;
[arXiv:0711.0974].
14. *Early black hole signals at the LHC*
Benjamin Koch, Marcus Bleicher, Horst Stocker;
7th Latin American Symposium on Nuclear Physics and Applications;
Cusco, Peru;
AIP Conf.Proc.947:376-382, 2007.
15. *An introduction to mini black holes at LHC*
Horst Stocker, Benjamin Koch, Marcus Bleicher;
36th International Symposium on Multiparticle Dynamics,
Rio de Janeiro, Brazil;
Braz.J.Phys.37:836-839, 2007.
16. *Black Holes at LHC?*
Benjamin Koch, Marcus Bleicher, Horst Stoecker;
Quark matter;
Shanghai;
J.Phys.G34:S535-542, 2007;
[arXiv:hep-ph/0702187].
17. *Black Holes and Qasistable Remnants at the LHC*
Benjamin Koch, Marcus Bleicher, Sabine Hossenfelder;
Fundamental Interactions;
Lake Louise, Canada;
Fund.Interactions.21:235-239, 2006.

18. *Towards a Realistic MSSM Prediction for Neutrino-nucleon Deep-inelastic Scattering.*
Oliver Brein, Wolfgang Hollik, Benjamin Koch;
14th International Conference on Supersymmetry and the Unification of Fundamental Interactions; Irvine, USA;
IPPP-06-74, 2006;
[arXiv:hep-ph/0611033].
19. *Signatures for Black Hole Production from Hadronic Observables at the Large Hadron Collider.*
Thomas J. Humanic, Benjamin Koch, Horst Stoecker;
International Symposium on Heavy Ion Physics (ISHIP);
Frankfurt, Germany;
Int.J.Mod.Phys.E16:841-852, 2006
[arXiv:hep-ph/0607097].
20. *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.*
B. Betz, M. Bleicher, U. Harbach, T. Humanic, B. Koch, H. Stoecker;
22nd Winter Workshop on Nuclear Dynamic;
La Jolla, USA, 2006;
[arXiv:hep-ph/0606193].
21. *Large Extra Dimensions and the Minimal Scale Constraints through High Precision Experiments.*
U. Harbach, B. Koch, M. Bleicher, S. Hossenfelder;
Annual Meeting of the Division of Particles and Fields;
Riverside, California, USA;
Int.J.Mod.Phys.A20:3334-3336, 2005.
22. *Radiative Corrections to Deep-inelastic Neutrino-nucleon Scattering in the MSSM.*
Oliver Brein, Wolfgang Hollik, Benjamin Koch;
International Conference on Linear Colliders (LCWS 2004);
Paris, France;
[arXiv:hep-ph/0408331].

Submitted Publications

23. *Exact renormalization group with optimal scale and its application to cosmology.*
Benjamin Koch, Israel Ramirez;
accepted for publication in CQG, 2010;
[arXiv:1010.2799].
24. *Trapping Black Hole Remnants.*
Sabine Hossenfelder, Benjamin Koch, Marcus Bleicher;
Unpublished, 2005;
[arXiv:hep-ph/0507140].