

LIST OF PUBLICATIONS
PRZEMYSŁAW TOMASZ MAŁKIEWICZ

Post-PhD Research (2009-2010)

1. P. Malkiewicz and W. Piechocki, Turning big bang into big bounce: Quantum dynamics, *submitted for publication*, arXiv:0908.4029.
2. P. Malkiewicz and W. Piechocki, Foamy structure of spacetime, *submitted for publication*, arXiv:0907.4647.
3. P. Dzierzak, J. Jezierski, P. Malkiewicz and W. Piechocki, The minimum length problem of Loop Quantum Cosmology, *Acta Phys. Pol. B* **41** (2010) 717, arXiv:0810.3172.
4. *P. Dzierzak, P. Malkiewicz and W. Piechocki, Turning Big Bang into Big Bounce: I. Classical Dynamics, *Phys. Rev. D* **80**, 104001 (2009), arXiv:0907.3436.
5. *P. Malkiewicz and W. Piechocki, Energy Scale of the Big Bounce, *Phys. Rev. D* **80**, 063506 (2009), arXiv:0903.4352.

PhD Research (2005-2010)

1. P. Malkiewicz, Propagation of extended objects across singularity of time-dependent orbifold, *Ann. Phys.* **4** (2010), arXiv:1001.3267.
2. P. Malkiewicz and W. Piechocki, Dirac quantization of membrane in time dependent orbifold, *submitted for publication*, arXiv:0905.3900.
3. P. Malkiewicz and W. Piechocki, Classical membrane in a time dependent orbifold, *submitted for publication*, arXiv:0903.0774.
4. *P. Malkiewicz and W. Piechocki, Excited states of a string in a time dependent orbifold, *Class. Quant. Grav.*, **26** (2009) 015008, arXiv:0807.2990.
5. P. Malkiewicz and W. Piechocki, Transition of an extended object across the cosmological singularity, *Acta Phys. Pol. B* **38** (2007) 3947.
6. P. Malkiewicz and W. Piechocki, Propagation of a string across the cosmological singularity, *AIP Conf. Proc.* **957**, 429-432 (2007).
7. P. Malkiewicz and W. Piechocki, Propagation of a string across the cosmic singularity, *Class. Quant. Grav.*, **24** (2007) 915, arXiv:gr-qc/0608059.
8. P. Malkiewicz and W. Piechocki, Probing the cosmic singularity with a particle, *Class. Quant. Grav.*, **23** (2006) 7045, arXiv:gr-qc/0606091.
9. P. Malkiewicz and W. Piechocki, The simple model of big-crunch/big-bang transition, *Class. Quant. Grav.*, **23** (2006) 2963, arXiv:gr-qc/0507077.
10. P. Malkiewicz and W. Piechocki, Quantum particle in the Milne space, *Journ. Physics: Conference Series* **33** (2006) 236.

11. P. Malkiewicz and W. Piechocki, A toy model of the cosmic singularity, Intern. Journ. Geometric Methods Mod. Phys., Vol. 4 No 2 (2006) 305.

Pre-PhD Research (up to 2005)

1. P. Malkiewicz and M. Nieszporski, Darboux transformations for q-discretizations of 2D second order differential equations, Journal of Nonlinear Mathematical Physics Volume **12**, Supplement 2 (2005), 231-239.

*** These articles were selected by me as my three best articles.**