pion and proton leading spectra is due to their different gluon distributions. We predict a universality in the diffractive leading particle spectra in the large momentum region, which turns out to be independent of the incident energy and of the projectile type.

[1] F.O.Durães, F.S.Navarra and G.Wilk, Phys. Rev.D58(1998)094034
[2] F.O.Durães, F.S.Navarra and G.Wilk, Mod.Phys. Lett. A13(1998)2873
[3] F.O.Durães, F.S.Navarra and G.Wilk, Braz. J. Phys. 28 (1998) 505
[4] F.O.Durães, F.S.Navarra and G.Wilk, Proc. of the Vth Rio de Janeiro Int. Workshop on Relativistic Aspects of Nuclear Physics, CBPF, Rio de Janeiro 30 August – 2 September 1997, eds. T. Kodama et al., World Scientific 1998, p.416

[1] Instituto de Fisica, Universidade de São Paulo, Brazil.

8.18 Multiparticle Production Phenomenology

by N.Suzuki[1], M.Biyajima[2], G. Wilk, Z.Włodarczyk[3]

PL9901842

We have analysed cumulant moments of negatively charged particles observed in hadron-nucleus collisions [1]. Our goal was to demonstrate that fluctuations seen in those moments do not bear information of the fundamental aspects of multiparticle production processes (as has been repeatedly argued recently on many occasions) but result from the natural truncation of the observed multiplicity distributions.

[1] N.Suzuki, M.Biyajima, G.Wilk, Z.Włodarczyk, Phys. Rev. C58(1998)1720

[1] Matsusho Ganken Junior College, Matsumoto, Japan
[2] Dept. of Phys., Shinshy Univ., Matsumoto, Japan
[1] Inst. of Phys., Pedagogical Univ., Kielce, Poland

8.19 HBT Interferometry

by G.Wilk

PL9901843

The perspectives of Bose-Einstein correlations (known also as HBT interferomety) for the foreseen measurements of photons and neutral pions in the ALICE experiment at LHC have been discussed and sumarized for the use of the ALICE collaboration [1].

[1] G.Wilk, ALICE/98-53; Internal Note/PHYS; 27 Sept. 1998

8.20 Global Geometry of Spacetime and Quantization

by W.Piechocki and G.Jorjadze[1]

PL9901844

We consider classical and quantum dynamics of a relativistic particle in two-dimensional Lorentzian spacetimes with constant curvature. It turns out that specification of the Lagrangian of a system and its local symmetries are not sufficient for finding an unique quantum system corresponding to the classical one. To quantive the system it is necessary to specify the topology and global symmetries of the spacetime[1-8].

[1] G.Jorjadze and W.Piechocki, Class. Quantum Grav. 15(1998)L41G.Jorjadze and W.Piechocki, Theor. Math. Phys. 118(1999) in press
[2] G.Jorjadze and W.Piechocki, Phys. Lett. B, 1999, in press (hep_th/970905)
[3] G.Jorjadze and W.Piechocki, Preprint gr-qc/9811094
[4] G.Jorjadze and W.Piechocki, in: Proc. Intern. Conf. "Particles, Fields and
[5] Conference Proceed. 453, Woodbury, New York, 1998) p.472
[6] G.Jorjadze and W.Piechocki, in: Proc. XVII Workshop on Geometric Method in Physics, Białowieża, July 1998, in press
[7] G.Jorjadze and W.Piechocki, in: Proc. Intern. Seminar in Physics and Mathematics, Tbilisi, Georgia, Sept. 1998, in press
[1] G.Jorjadze and W.Piechocki, in: Proc. XII Max Born Symposium, Wrocław, Sept. 1998, in press

[1] Rozmadze Mathematical Inst., Tbilisi, Georgia