『非加法的統計力学の最近の成果』
"Recent topics of nonextensive statistical mechanics"

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In this talk we shall briefly review frontier topics of nonextensive statistical physics. Predictions, verifications and applications for natural, artificial and social systems will be focused on. Topics will include from elementary particles (recent experiments by the Collaborations CMS, ALICE and ATLAS at LHC/CERN and Collaboration PHENIX at RHIC/ Brookhaven), low temperature phenomena, turbulence to econophysics, medical applications, and nonlinear generalizations of Schroedinger, Klein-Gordon and Dirac equations.

References:
(i) J. S. Andrade Jr., G.F.T. da Silva, A.A. Moreira, F.D. Nobre and E.M.F. Curado, Phys. Rev. Lett. 105, 260601 (2010);
(ii) F.D. Nobre, M.A. Rego-Monteiro and C. Tsallis, Phys. Rev. Lett. 106, 140601(2011);
(iii) J. Ludescher, C. Tsallis and A. Bunde, "Universal behaviour of interoccurrence times between losses in financial markets: An analytical description", Europhys. Lett. 95, 68002 (2011).