## Abstract Submitted for the APR12 Meeting of The American Physical Society

Strangeness Enhancement in Heavy Ion Collision M.A.K. LODHI, Department of Physics, Texas Tech U, Lubbock, TX and Theory and Applied Physics Group, COMSATS IIT, Islamabad, Pakistan, FAISAL AKRAM, Centre for High Energy Physics, Punjab U, Lahore, Pakistan — At the LHC energy the strangeness enhancement is expected to saturate leading to fireball of matter expanding and breaking apart, which in turn would provide a very high abundance of strange hadrons. The interaction cross section of kaon with  $B_c$  would thus be useful in calculating the production rate of  $B_c$  in relativistic heavy ion collision. Accordingly, the cross sections of  $B_c$  absorption by kaons are presented, which are calculated using meson exchange model based on hadronic Lagrangian having SU(5) symmetry. The cross sections range from 0.2 to 12 mb for various processes. This scale of variation is comparable to that of pions.

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