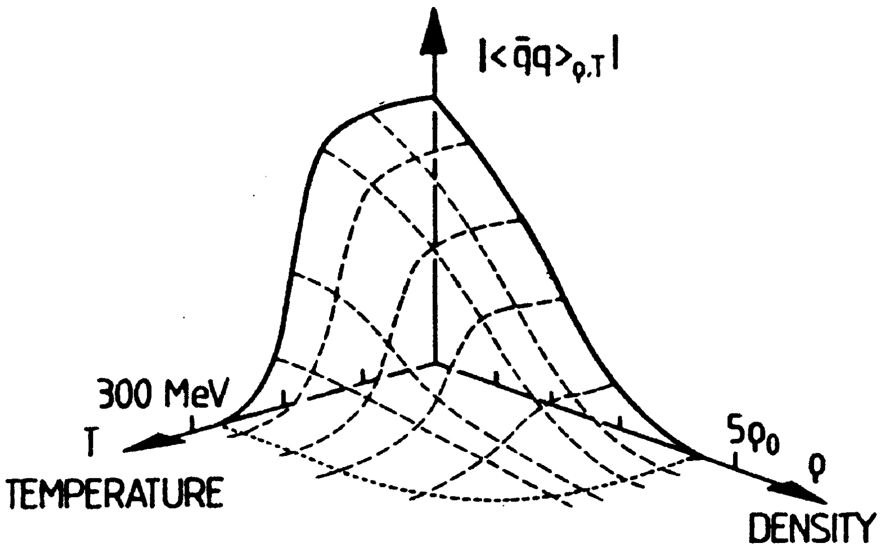
Chiral Symmetry Restoration



- The dilepton production cross section is proportional to the thermally averaged vector current-current correlation function $\langle\langle j_\mu^{em} j_\nu^{em}\rangle\rangle$, the conserved current of the chiral symmetry $SU_R(2) \times SU_L(2)$
- The dilepton spectrum may provide a signal for the existence of a chirally restored phase created in a heavy ion collision
- The chiral phase transition would be observed in the dilepton spectrum as a change of the vector meson properties (masses and widths) as a function of T and μ
- A comparison between different beam energies (160 vs. 40 AGeV or even lower) may elucidate the relative importance of T and μ