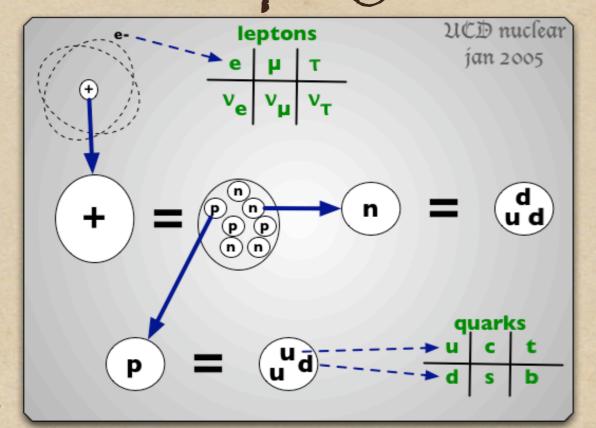
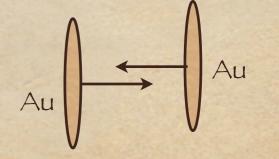
## nuclear physics at RHIC



RHIC investigates properties of nuclear matter under extreme energy and density

for gold, max energy = 100 GeV/nucleon

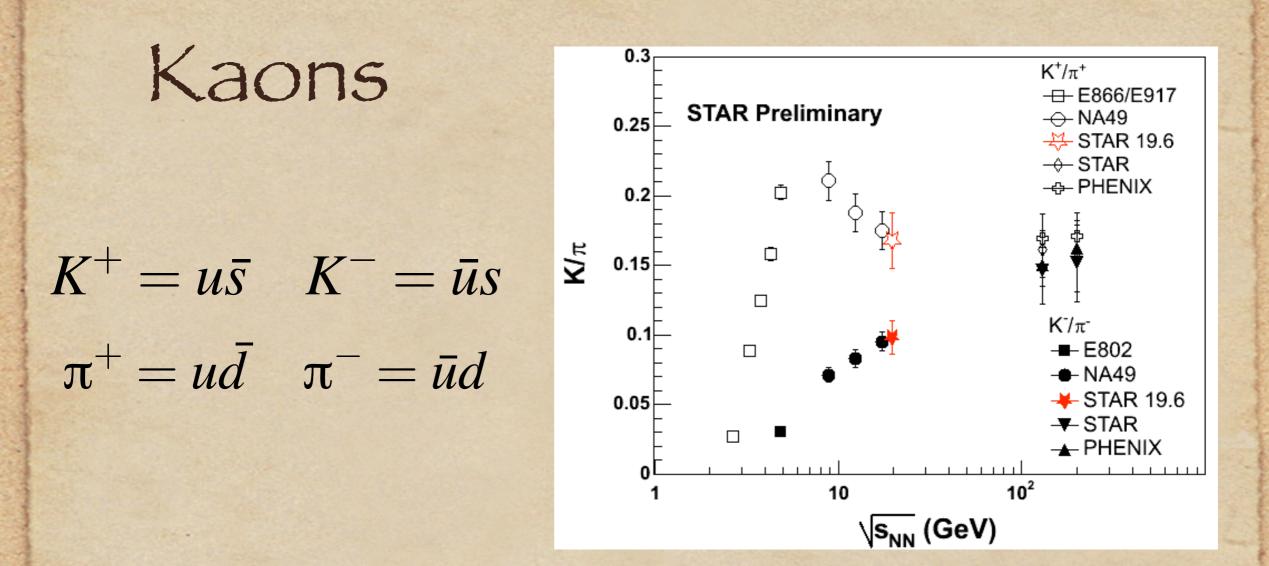
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d 0 Au

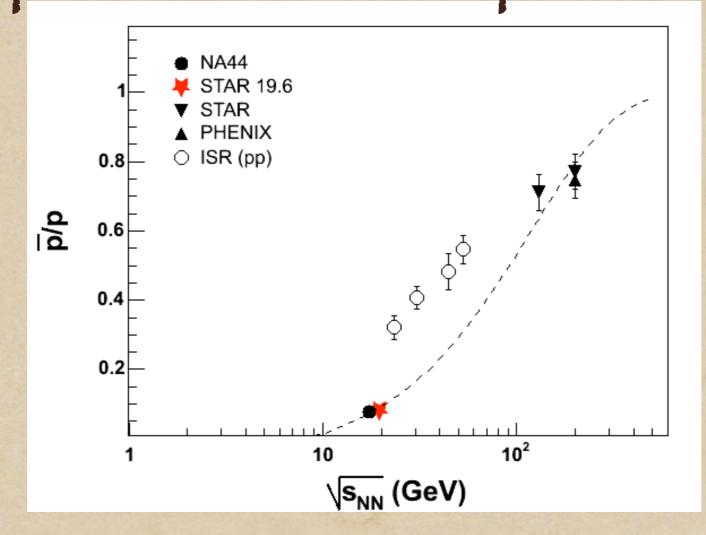
Cu Cu

Nuclear Physics Group



• strangeness production is predicted to be enhanced if a QGP is formed, due to gluon fusions (PRL48, 1066)  $g+g \rightarrow s+\bar{s} \rightarrow strange hadrons$ • interesting sharp peak of K<sup>+</sup>/ $\pi^+$  ratio UC Davis Physics Open House [5 Mar 2005] Nuclear Physics Group

## antíprotons and protons



antimatter/matter reaching unity with increasing collision energy

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