Strangeness in Quark Matter 2019



Contribution ID: 185

Type: Contributed talk

The spatial sub-separation of strangeness from anti strangeness in heavy-ion collisions at energies of FAIR and NICA

Thursday, 13 June 2019 16:10 (20 minutes)

The heavy-ion collisions at energies of FAIR and NICA are studied within the microscopic transport models. The whole interaction area is subdivided into the smaller cells. We perform the analysis of the space-time evolution of all particles in all cells, in the T-mu_B and T-mu_S planes, and the analysis in x-t of the finally emitted strange and non-strange particles.

Following the time evolution of both distributions, we clearly see the spacial separation of strangeness from anti-strangeness, as well as earlier freeze-out times of kaons and pions compared to those of protons and Lambdas. The latter appear to be frozen out at lower temperature and larger strangeness chemical potential.

Collaboration name

Track

Strangeness and Light Flavour

Primary authors: BRAVINA, Larisa (University of Oslo); Ms PANOVA, Oleksandra (Taras Shevchenko University of Kyiv); Prof. STOECKER, Horst (FIAS, Frankfurt a.M.); Dr ZABRODIN, Evgeny (SINP MSU and UiO)

Presenter: BRAVINA, Larisa (University of Oslo)

Session Classification: Strangeness and Light Flavour