

Outlook Chapter 7:

Hadrons and dileptons as probes of strongly interacting matter

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Contributors(18):

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Productive and intense discussion

Deadline for internal draft 06.01.25

Chapter 7.4: Individual contributions

Christoph Blume

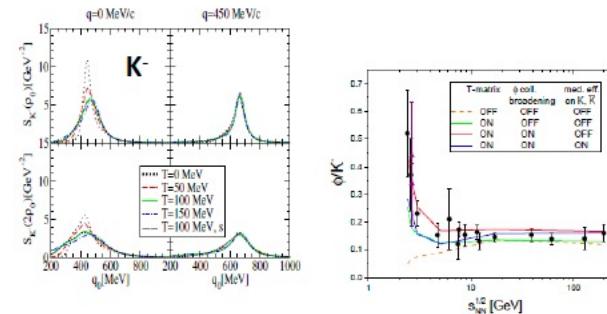
Compilation of measured, inclusive meson and baryon multiplicities in p+p collisions as a function of the center-of-mass energy

Claudia Hoehne:

strangeness, K1* resonances (incorporated)

LAURA TOLOS:

- Strange pseudoscalar mesons in nuclear matter
- Strange vector mesons in nuclear matter



TAESOO SONG:

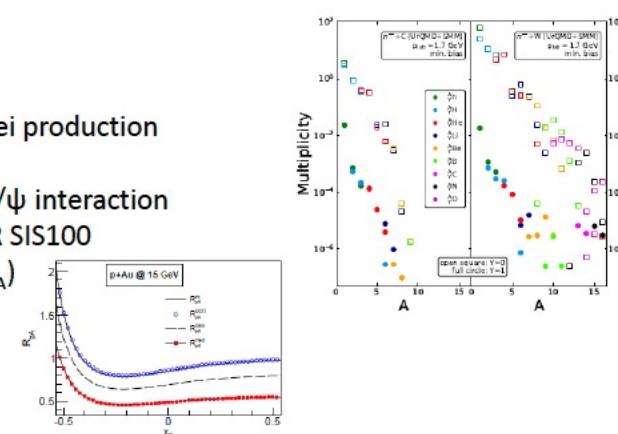
Strangeness production in heavy-ion collisions

TOM REICHERT:

For the $\pi + A$ section – light nuclei and hypernuclei production

PARTHA PRATIM BHADURI: Possibility to probe J/ψ interaction in nuclear matter via SIS100 p+A collisions at FAIR SIS100 (dissociation cross section by measurement of R_{pA})

Gyuri Wolf: study of in-medium spectral function of J/Ψ



7.1 State of the art

7.2 In-medium modification of hadrons: Theory overview

Laura, Elena, Taesoo, Gyuri

- 7.2.1 Light quark sector
- 7.2.2 Strange quark sector
- 7.2.3 Charm quark sector

Chapter 5

Tetyana

7.3 p(π) + p(n) reactions as reference for heavy-ion collisions

Chapter 4,5

- 7.3.1 Inclusive and exclusive cross sections and excitation functions of hadrons
- 7.3.2 Isospin effects in p+p and p+n
- 7.3.3 Systematic excitation of resonance in $\pi + p$ reactions
- 7.3.4 Possibilities with dileptons

Manuel

Tetyana, Piotr

7.4 p(π) + A reactions

- 7.4.1 In-medium hadron properties: light quark sector
- 7.4.2 In-medium hadron properties: strange quark sector
- 7.4.3 In-medium hadron properties: charm quark sector
- 7.4.4 Cold nuclear matter as reference for heavy-ion collisions
- 7.4.5 Emission of light nuclei and hypernuclei from cold nuclear matter Chapter 4
- 7.4.6 Influence of the electromagnetic fields on particle dynamics in nuclear matter
- 7.4.7 Short-range correlations
- 7.4.8 Dark Matter search (U-boson, X17)

Manuel

Jörg, Manuel

Gyuri, Manuel

Jörg

Manuel

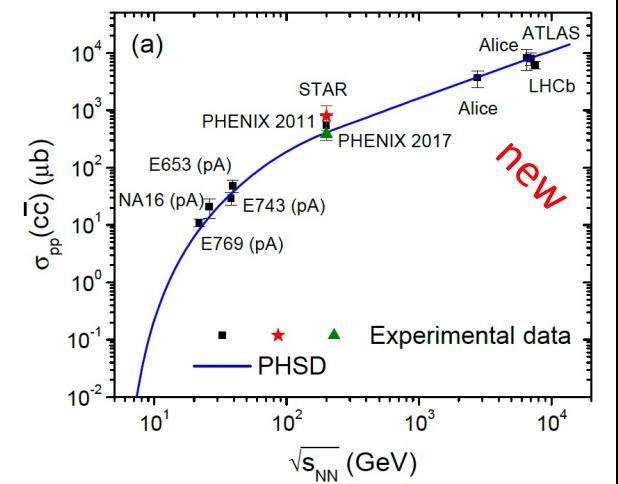
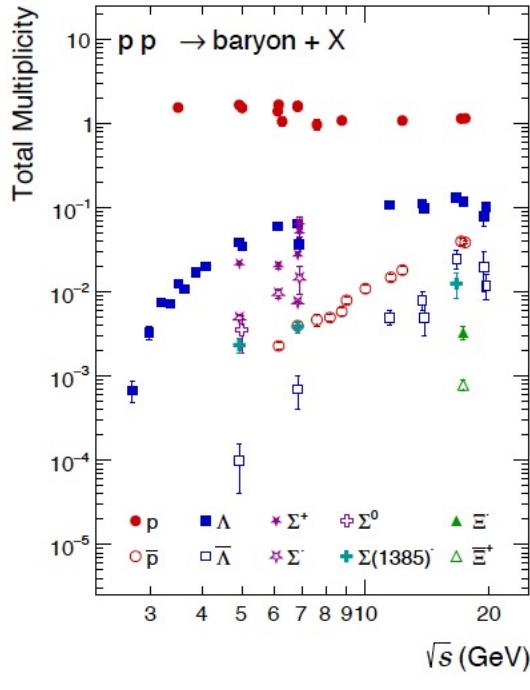
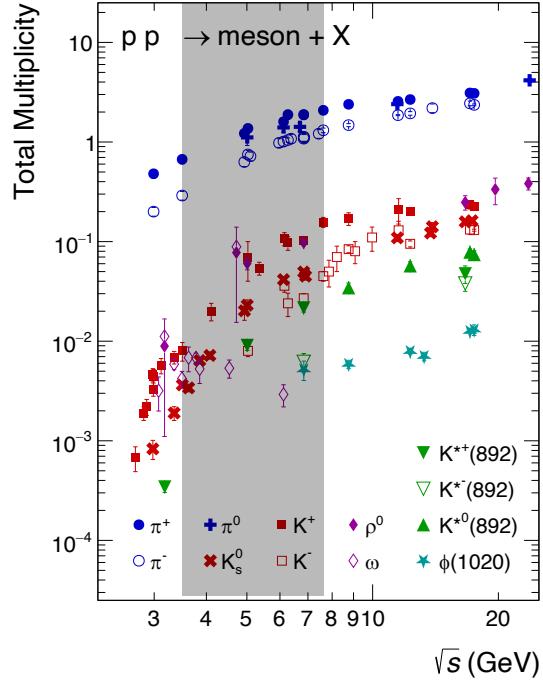
Elena

Manuel

Chapter 8

Piotr, Elena

Excitation functions in Section 7.1 and 7.4.4



$p+n$, $\pi+p$ and $p+A$ still to come.
Christoph, Taesoo, Gyuri

Chapter 4,5