SoW

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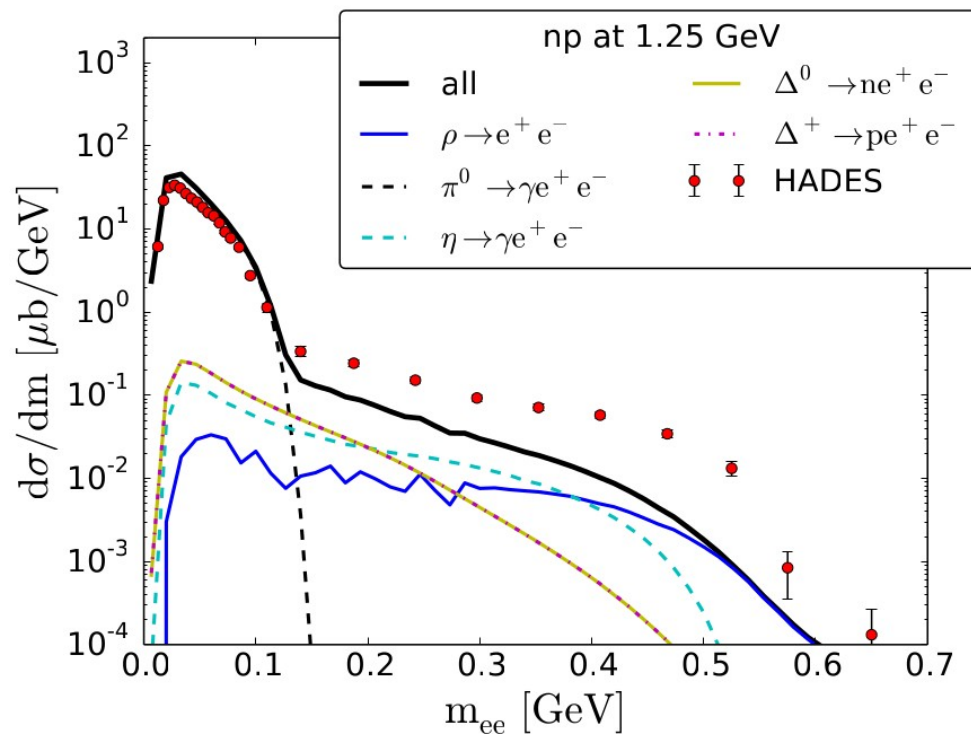
Tackling the "DLS puzzle" in SMASH
(BSc project)

What is the "DLS puzzle"?

BEVALAC dilepton spectrometer (DLS) and corresponding DLS collaboration measured dilepton (e^+e^-) emission in NN collisions

Observed dilepton yield in full dataset (released 1997) larger than calculated yields from transport models (UrQMD, BUU); observations later supported by HADES
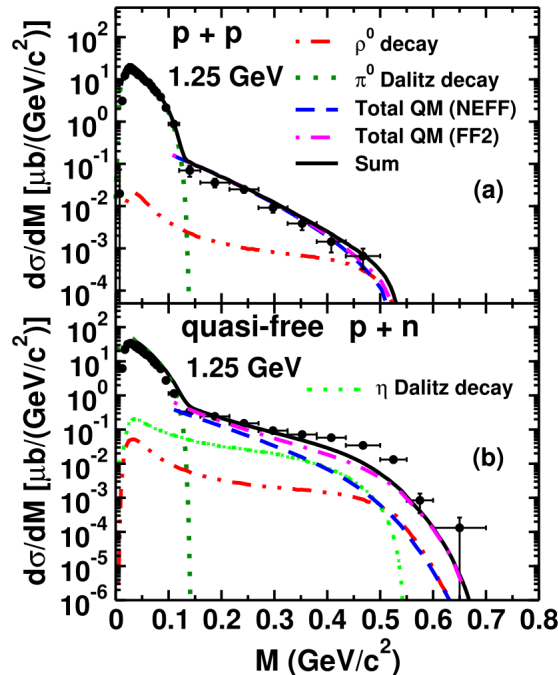
→ Discrepancy between models and observations resulted in term **"DLS puzzle"**
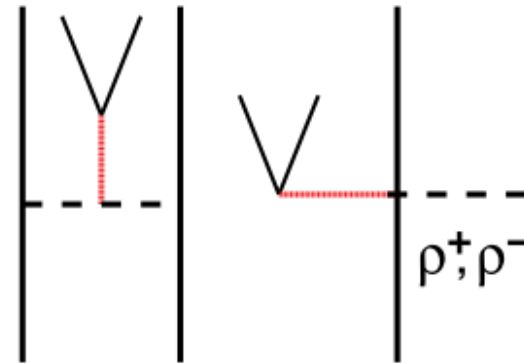
Goal and solution ideas

1) Goal of the BSc project

"Bring model closer to observations"

2) Idea

Include additional dilepton production channel via bremsstrahlung stemming from charged internal meson line

Current status

First graph with current release (SMASH-3.3)

np @ 1.5 GeV (10,000 events)