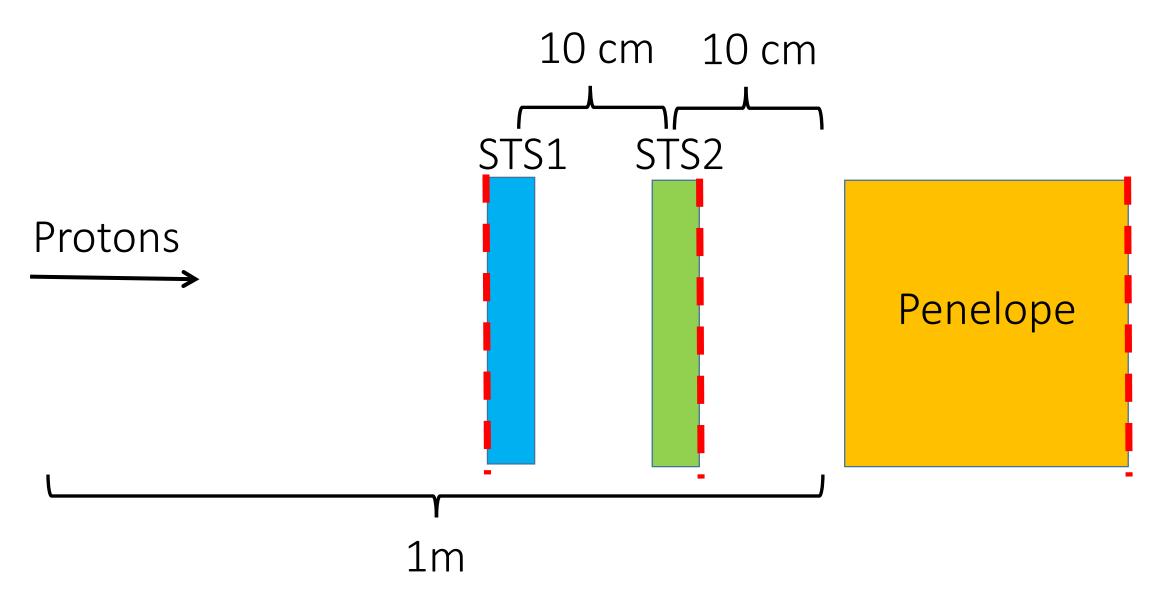
Preparing for the TIFPA beam test – FLUKA simulations

VALENTINA Giacometti

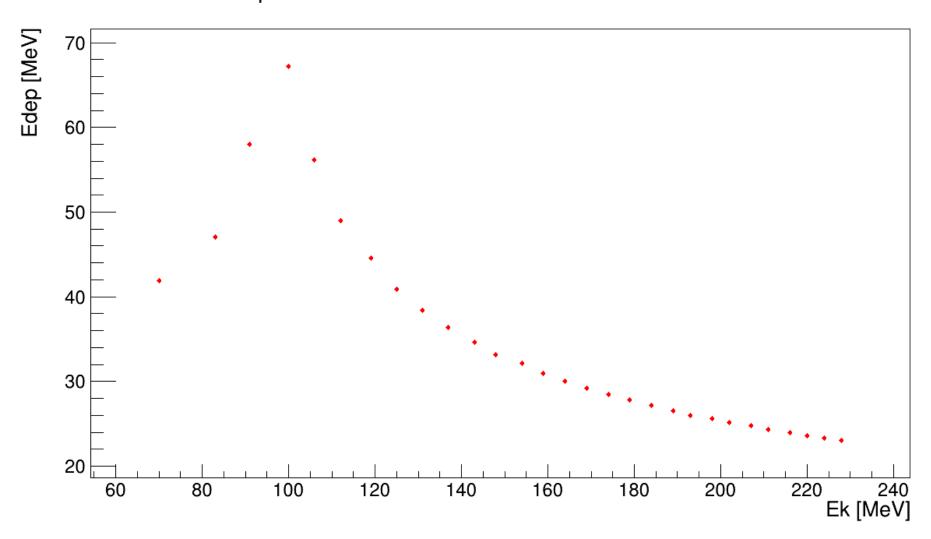
SIMULATION SETUP



27/04/2017 - TIFPA BEAM TEST SIMULATIONS

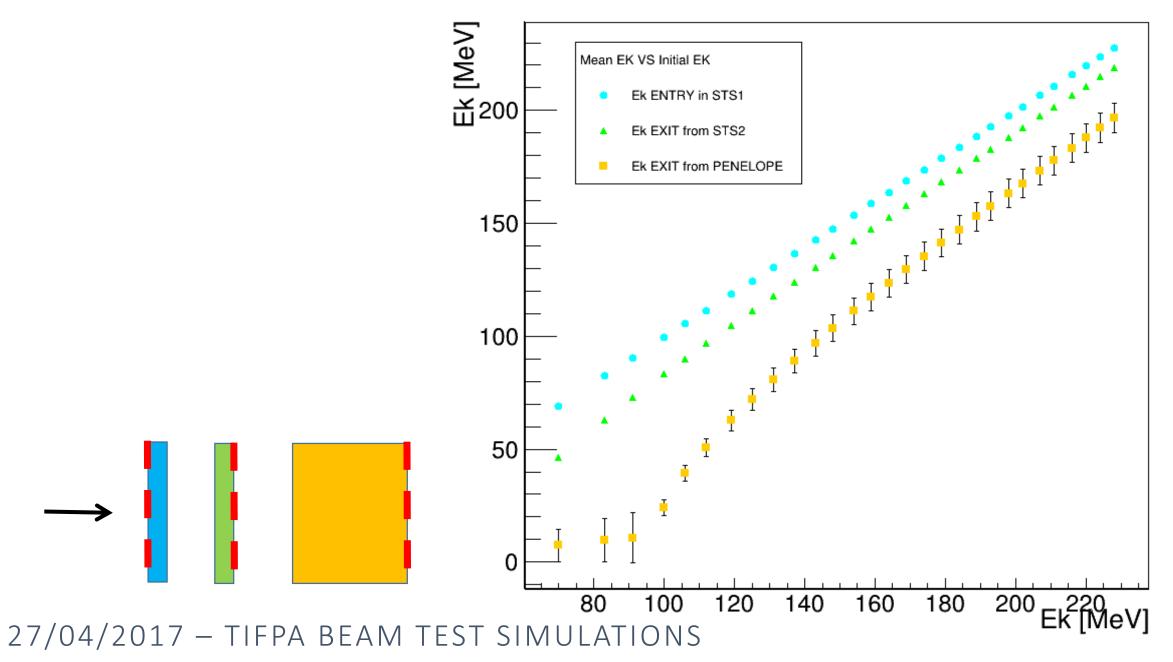
SOME RESULTS: mean deposited energy VS initial energy

Mean Deposited En PER PRIMARY PROTON IN PENELOPE vs EKin



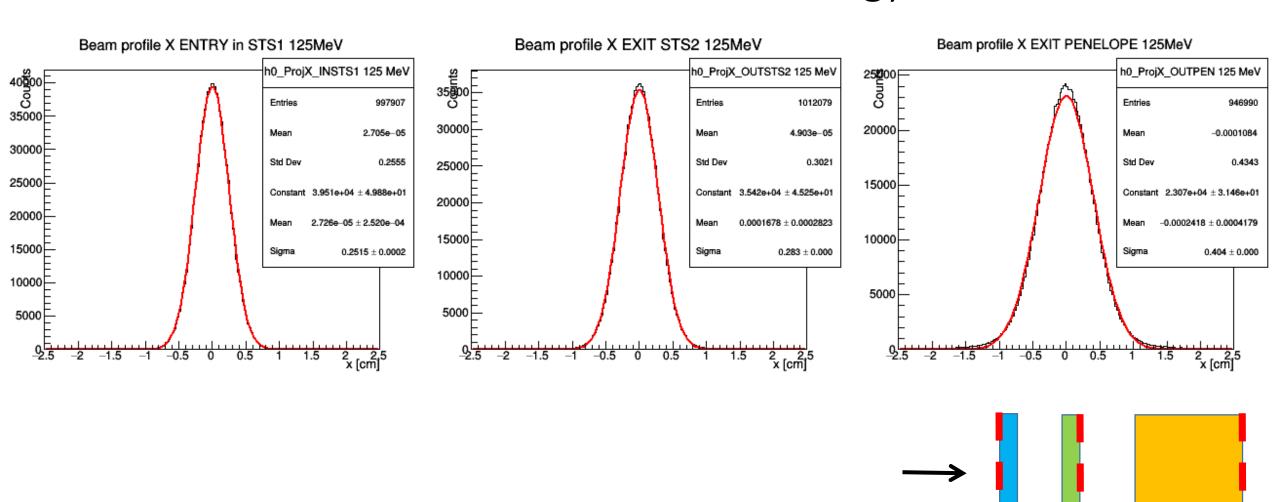
27/04/2017 - TIFPA BEAM TEST SIMULATIONS

SOME RESULTS: mean kinetic energy VS initial energy



SOME RESULTS: beam profile

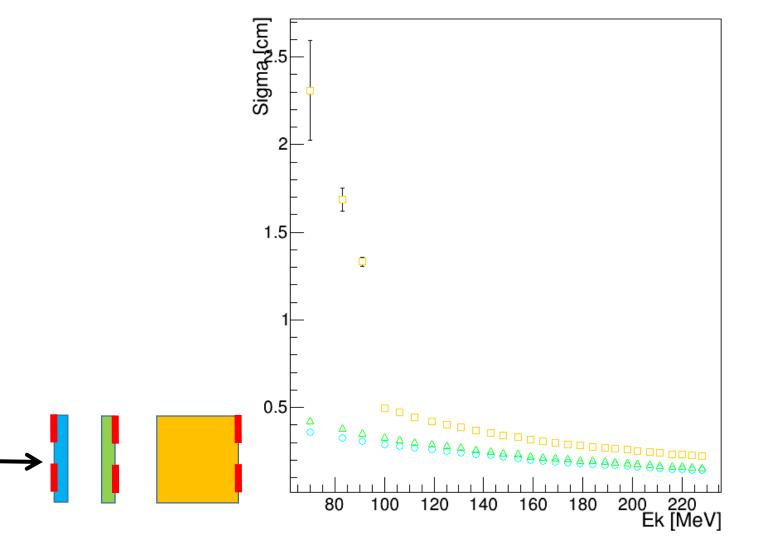
Beam Profile xz axis for Beam Energy 125 MeV

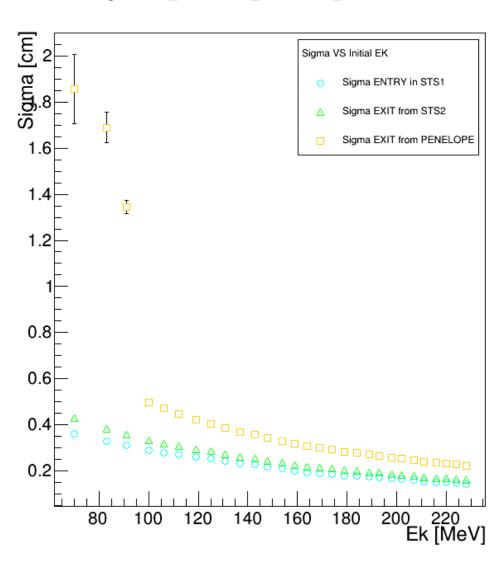


SOME RESULTS: beam profile sigma distribution VS initial energy



Sigma Y IN_STS1-OUT_STS2-OUT_PENEL vs EKin



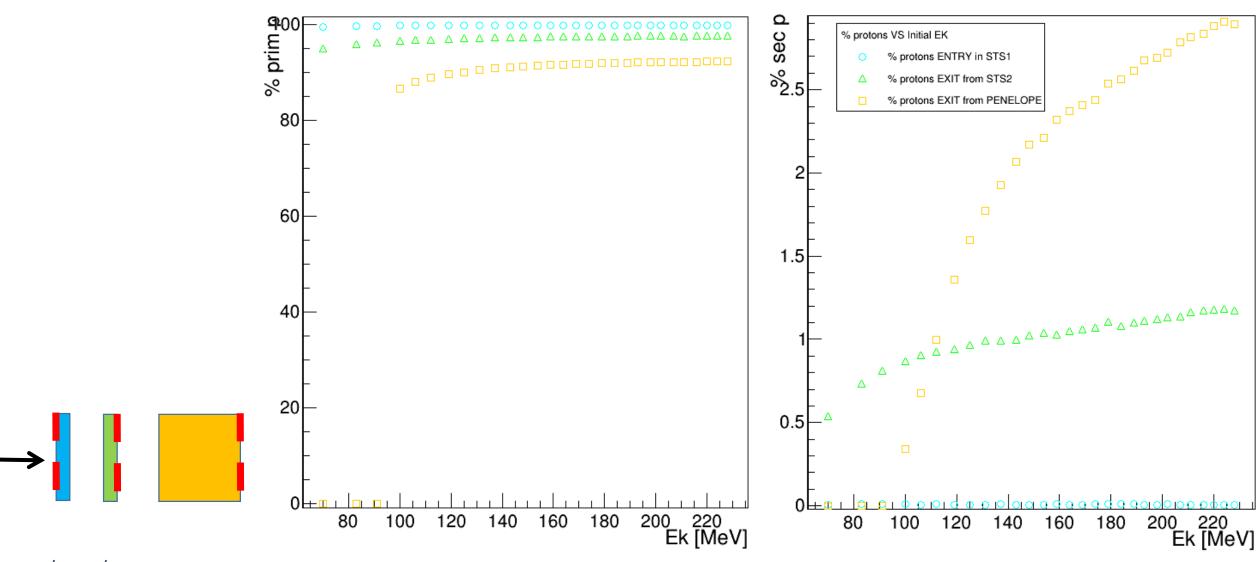


27/04/2017 - TIFPA BEAM TEST SIMULATIONS

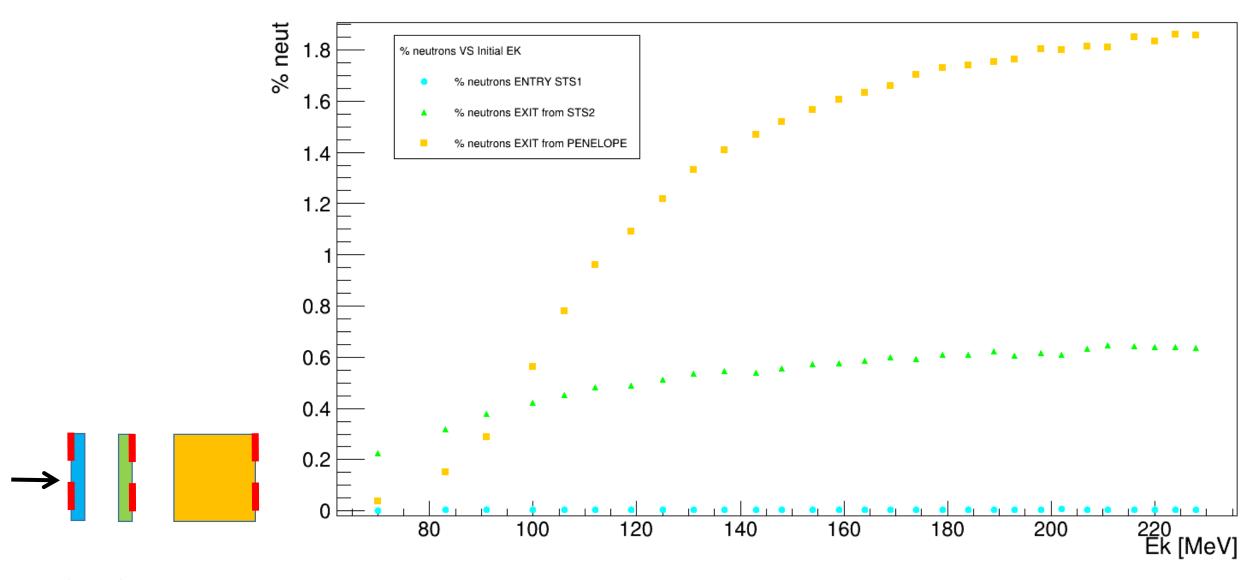
SOME RESULTS: % of primary & secondary protons VS initial energy

Primary Prot IN_STS1-OUT_STS2-OUT_PENEL vs EKin

Secondary Prot IN_STS1-OUT_STS2-OUT_PENEL vs EKin



SOME RESULTS: % of neutrons (>10 MeV) VS initial energy



SOME RESULTS: beam profile

Beam Profile yz axis for Beam Energy 125 MeV

