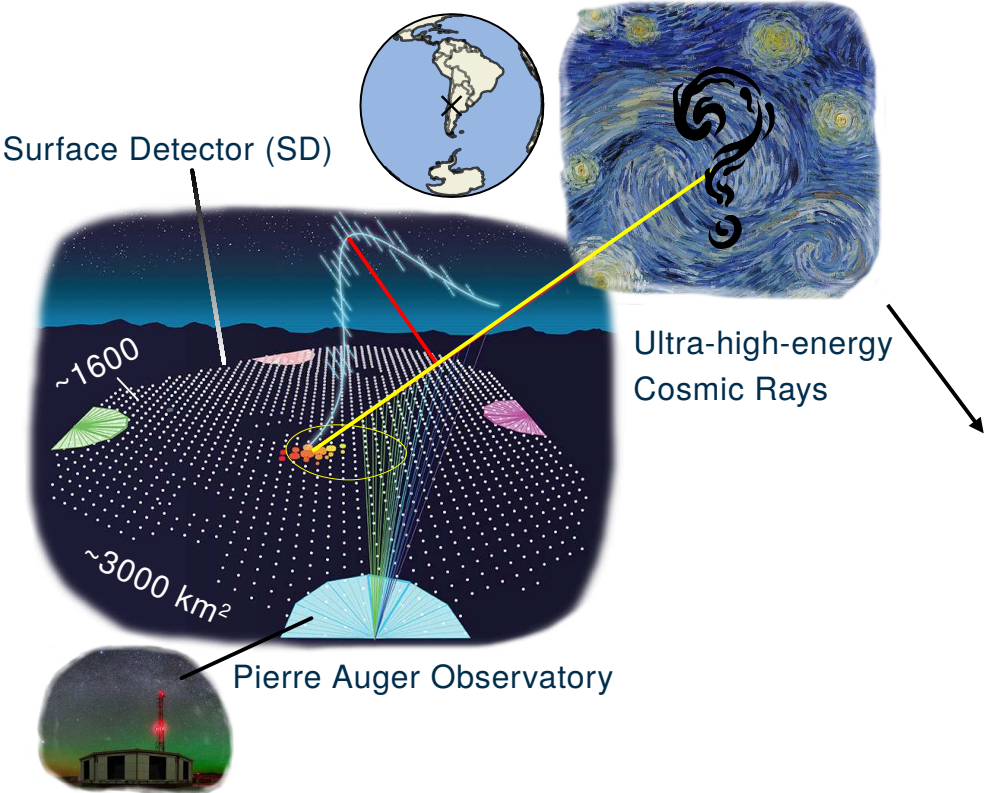
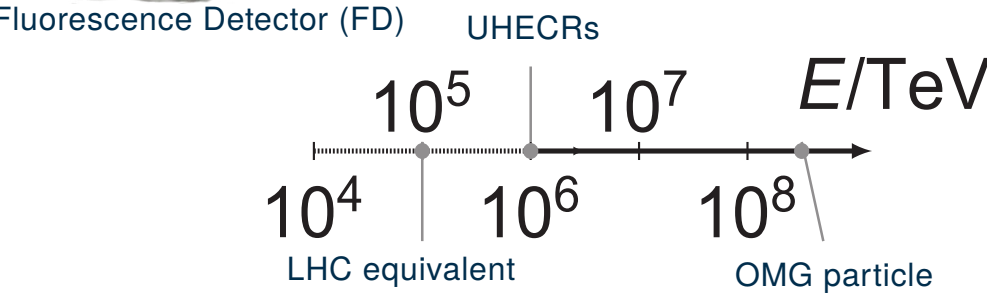
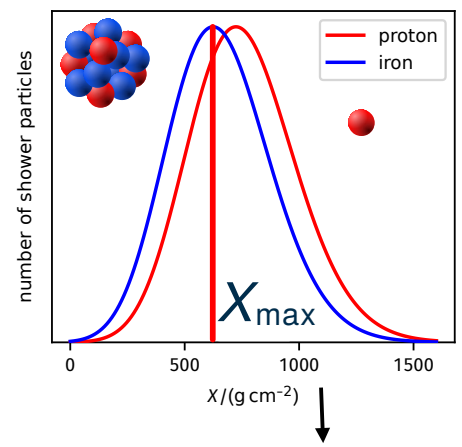
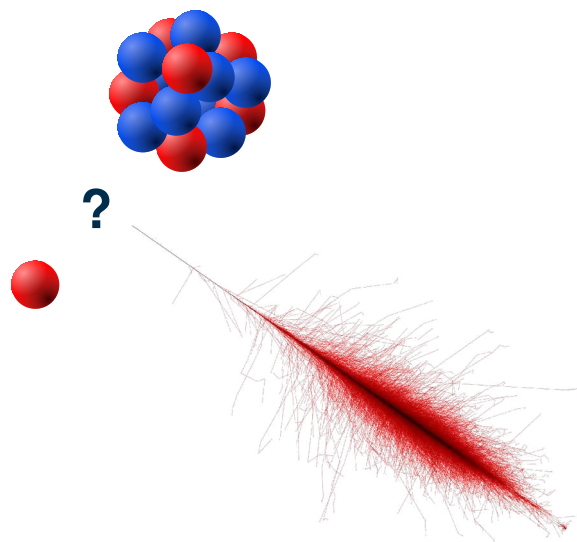


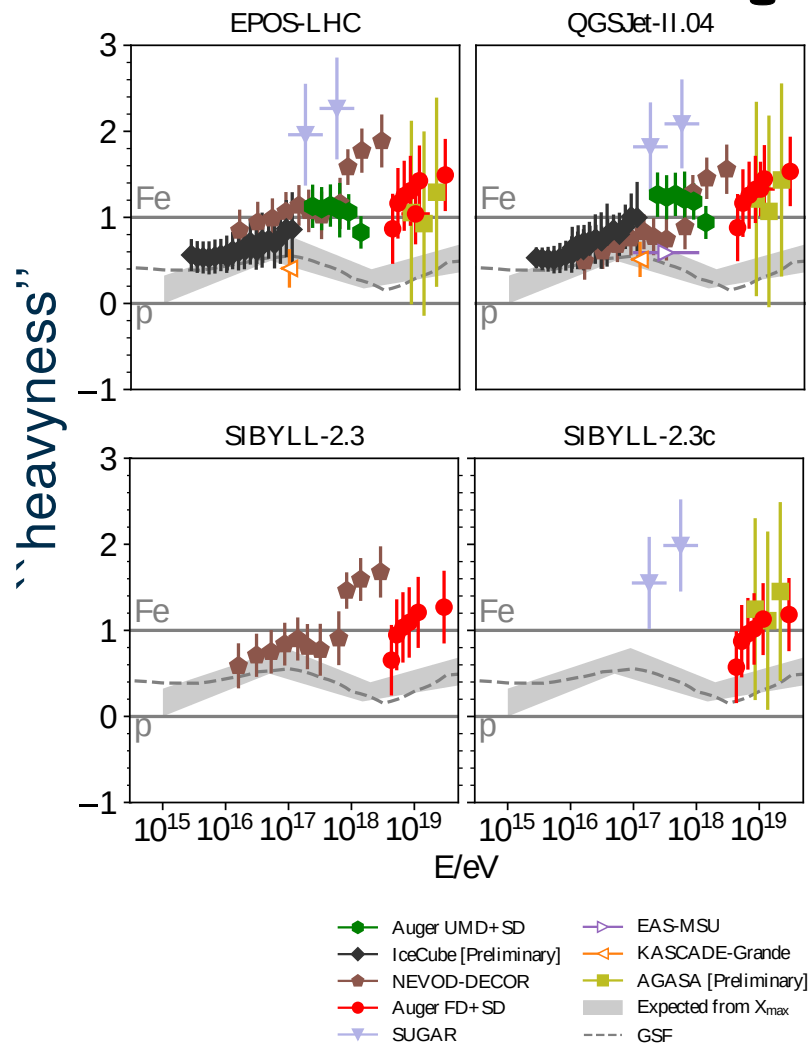
Reconstruction of mass-sensitive air-shower observables with the surface detector of the Pierre Auger Observatory using neural networks



we need high-statistics mass separation!

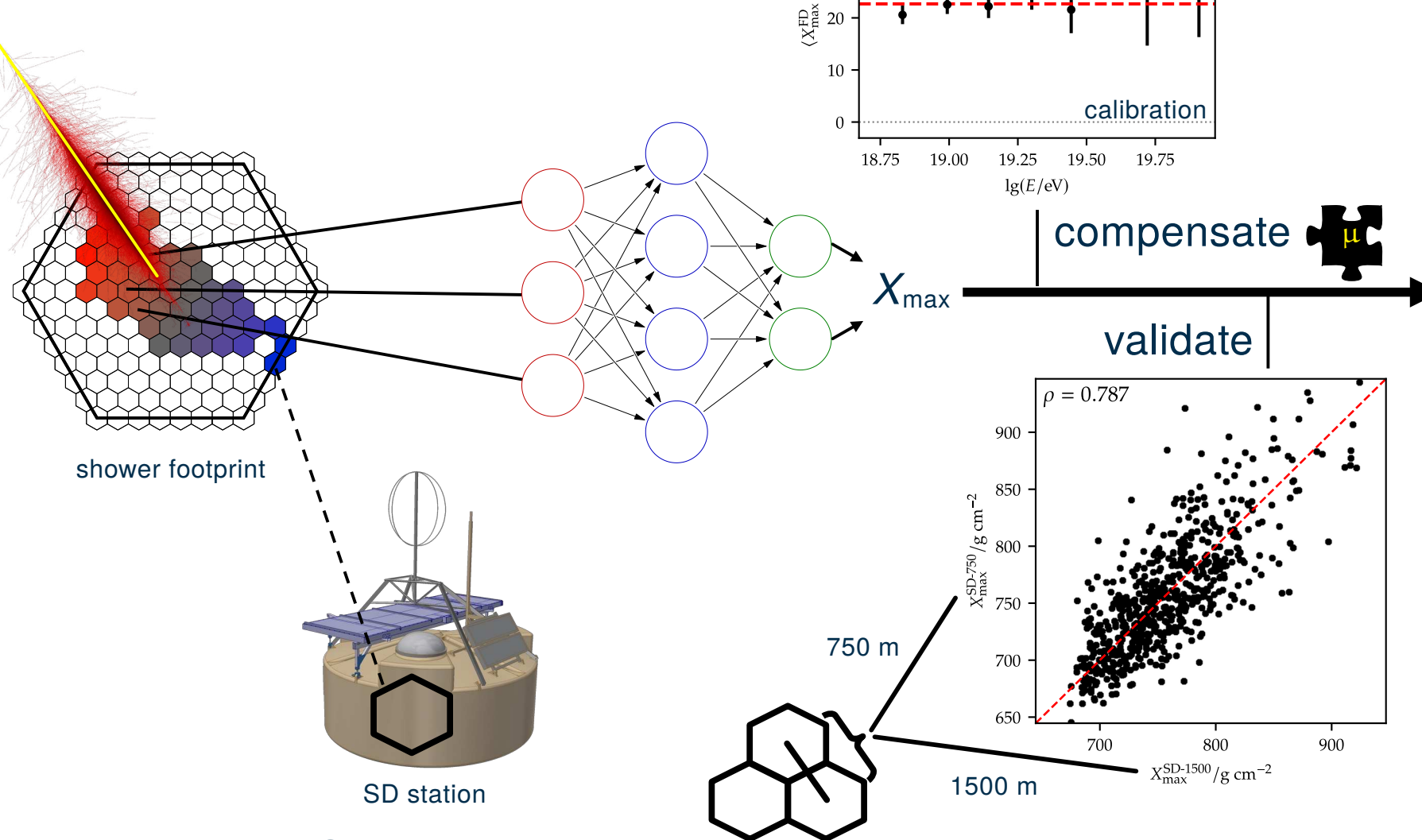
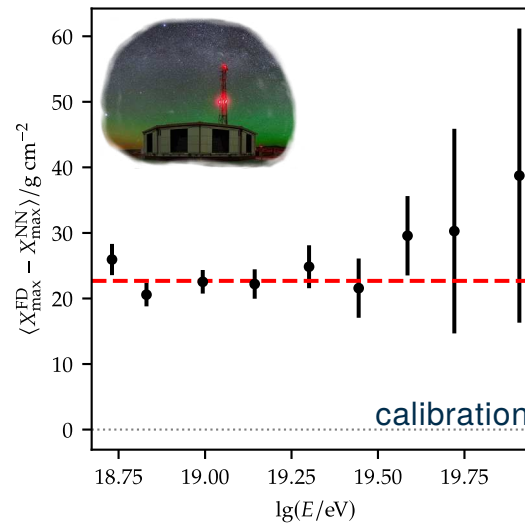


muon puzzle 



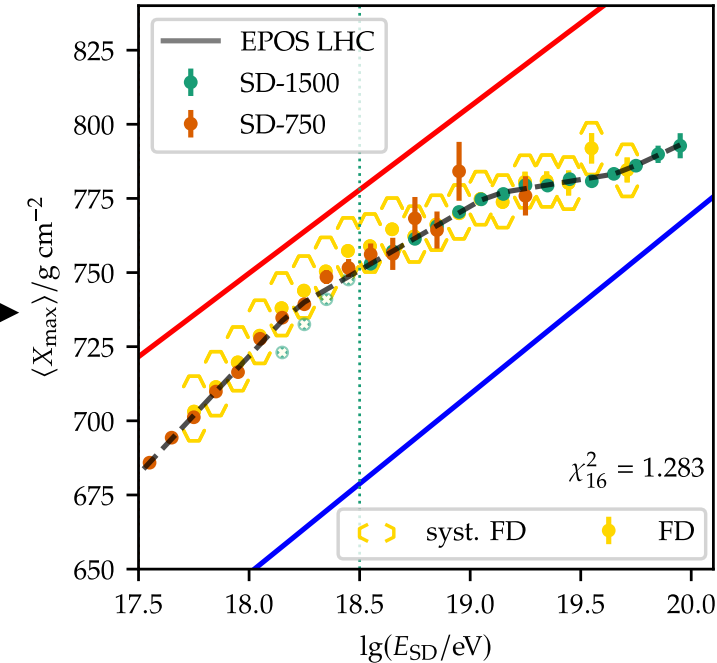
How?

Leveraging spatio-temporal information from triggered SD stations



Pass by, there will be candy!

x5 statistics



almost 3 orders of magnitude in energy & beyond FD