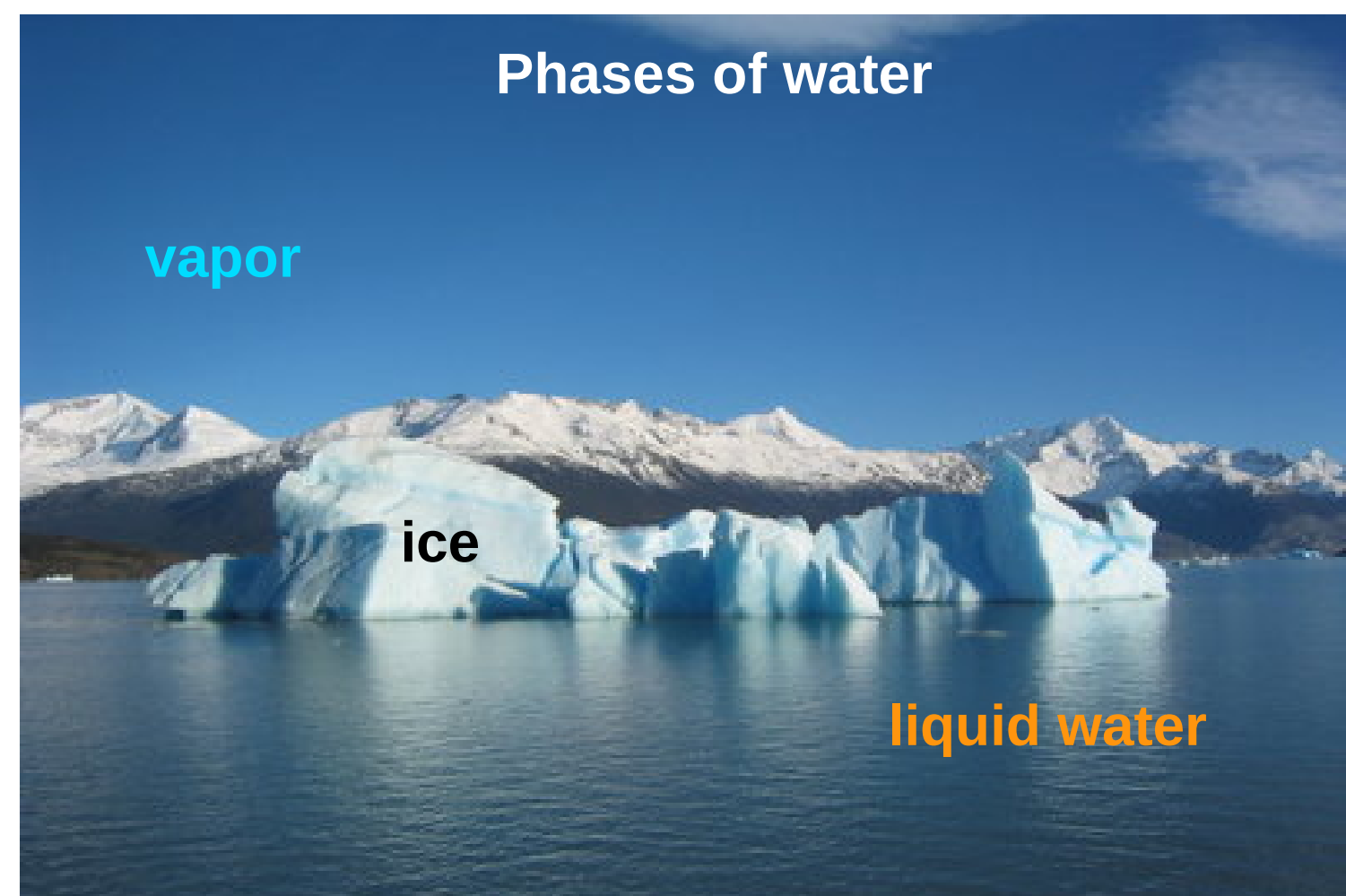




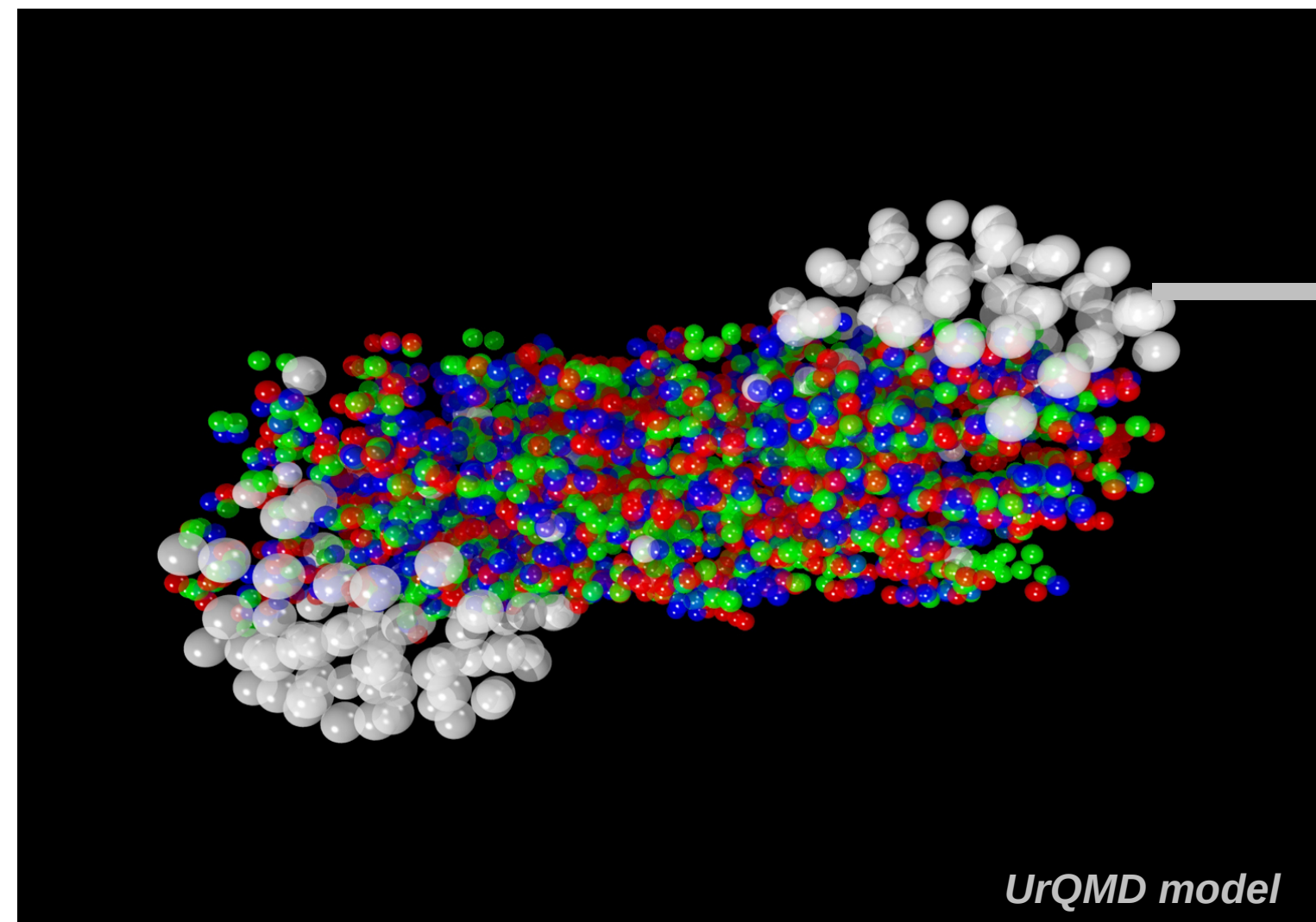
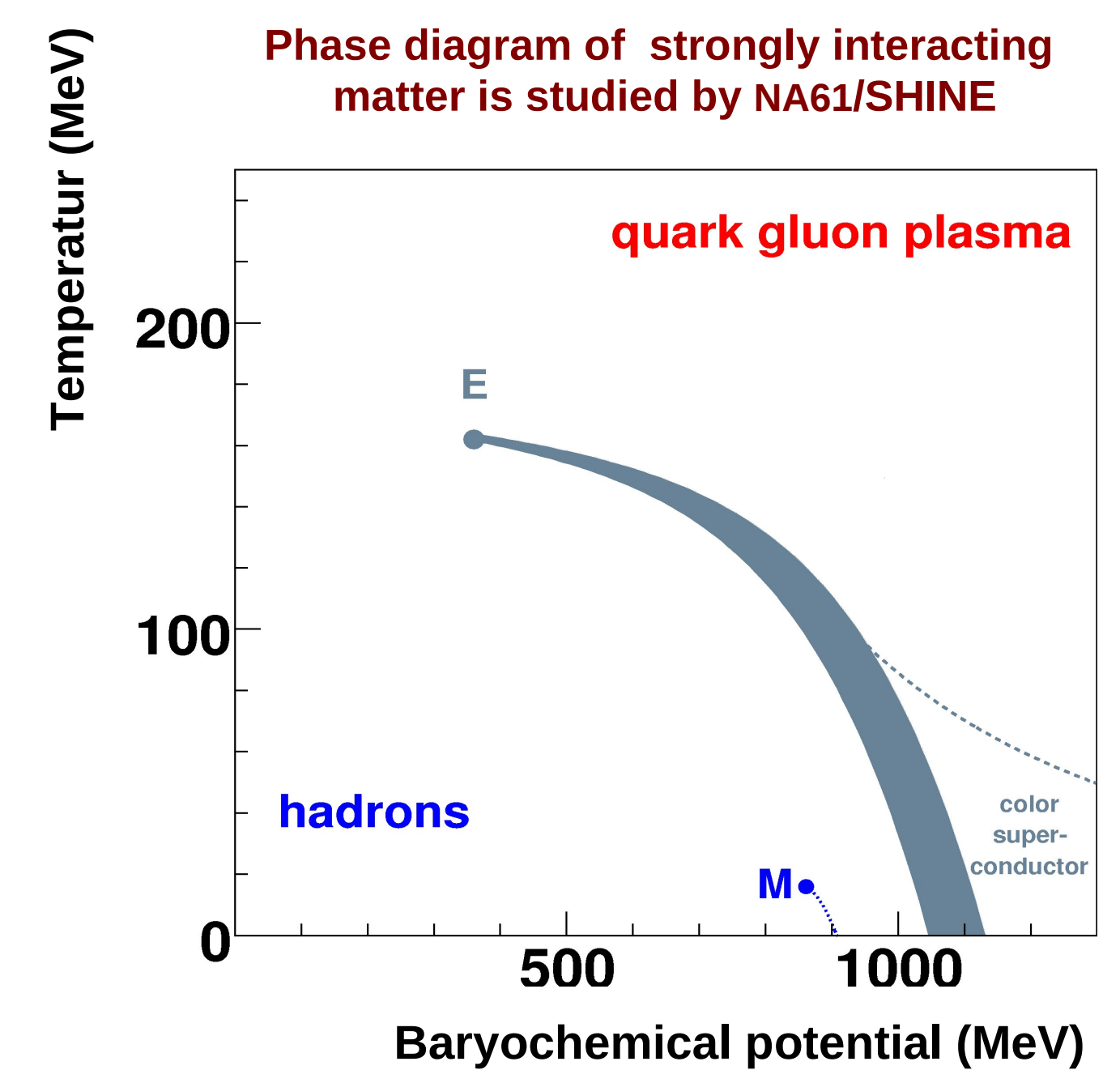
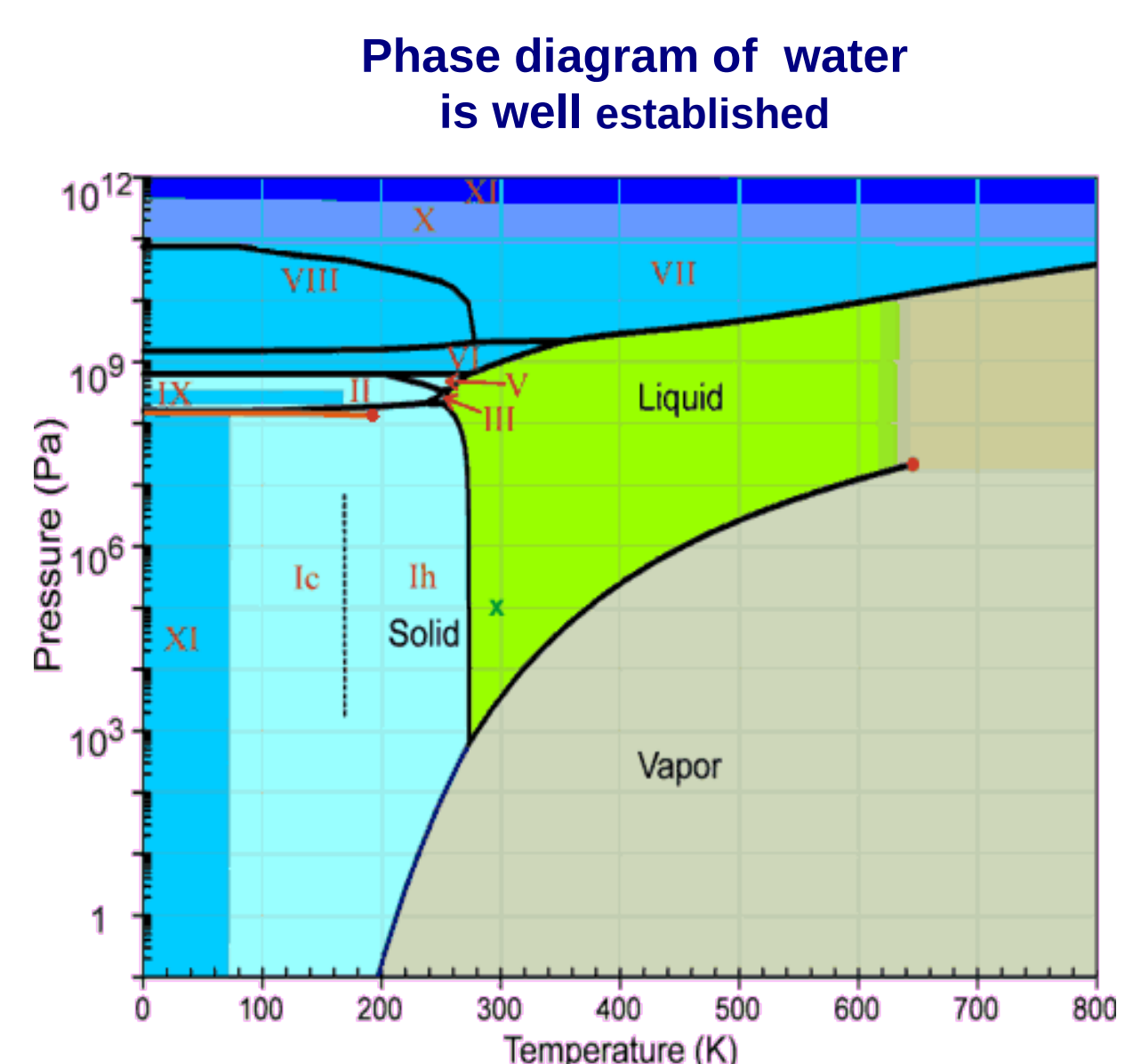
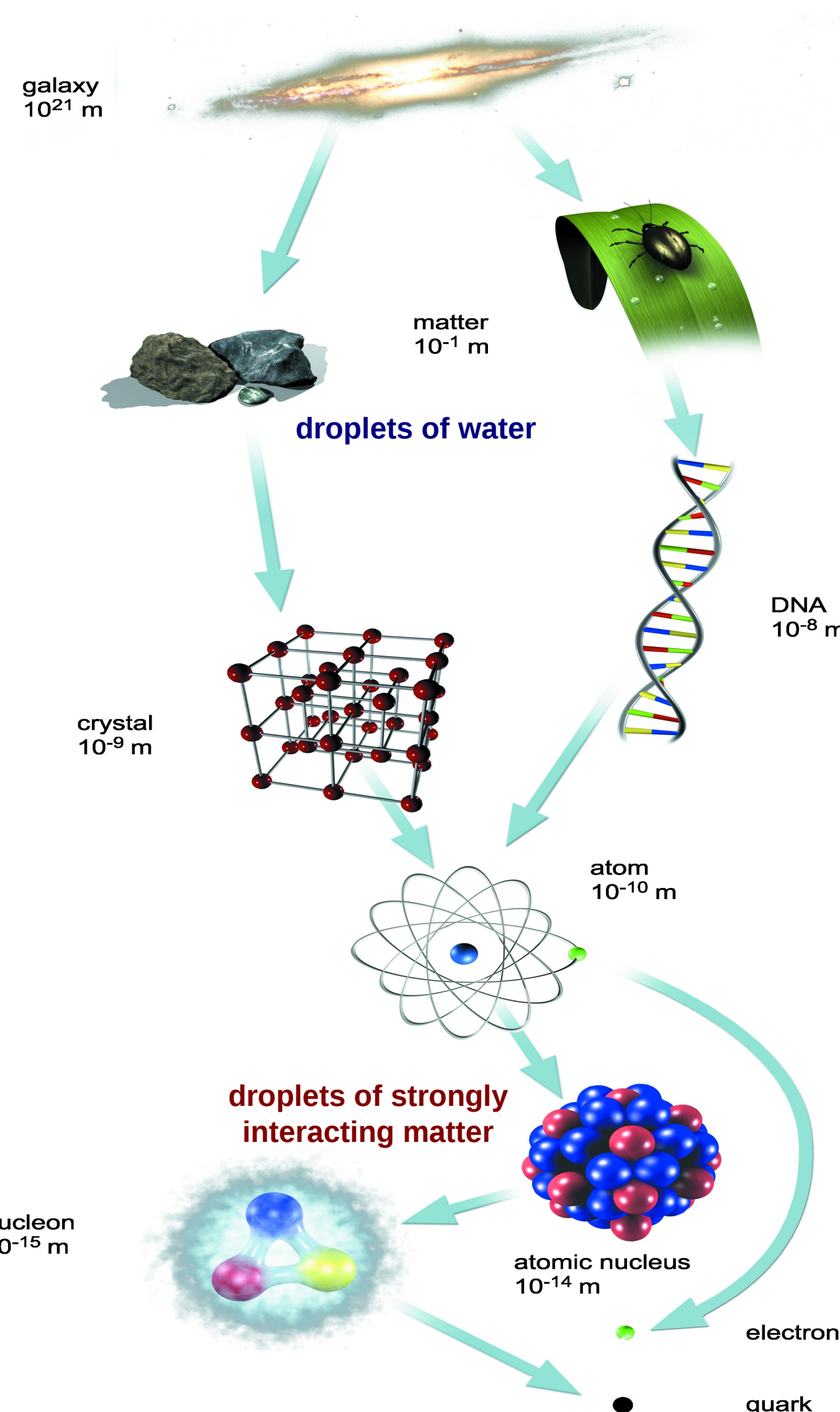
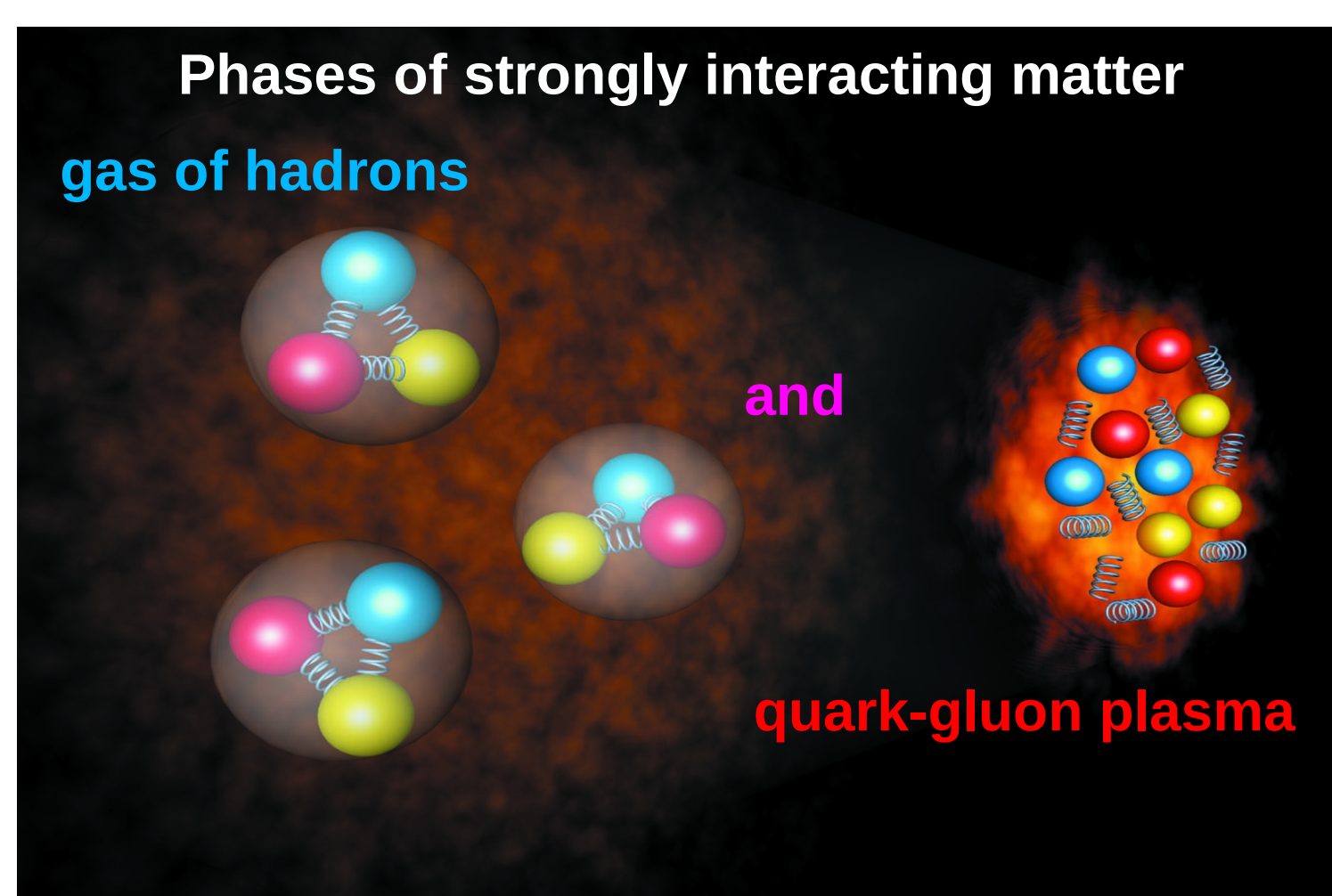
Nucleus-nucleus collisions in NA61/SHINE

The main goal of studying nucleus-nucleus (A+A) collisions in NA61/SHINE is the investigation of the transition between two phases of strongly interacting matter

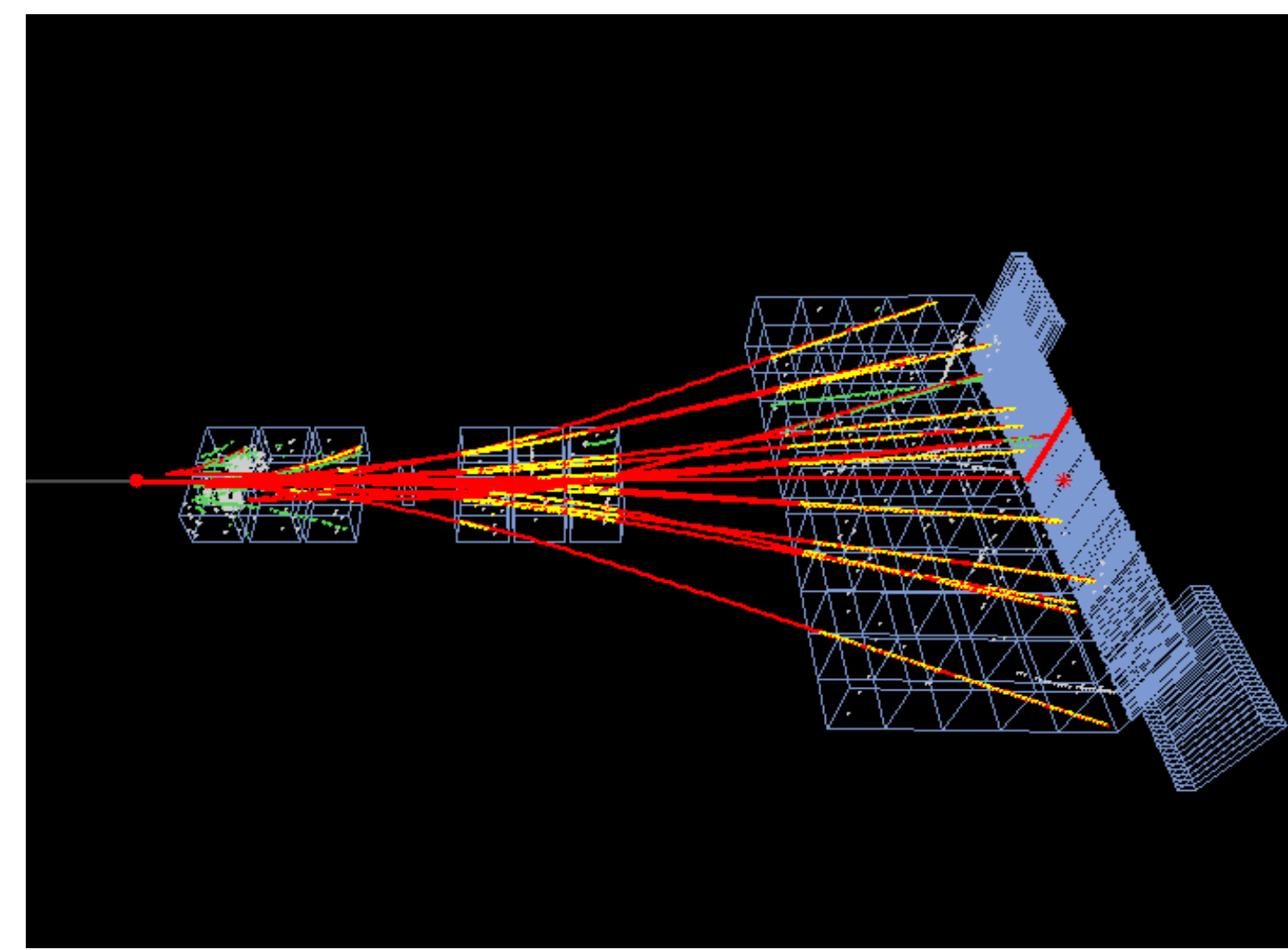


Properties of water, its phases and transitions between them, are defined by electromagnetic interactions and can be easily studied in the laboratory.

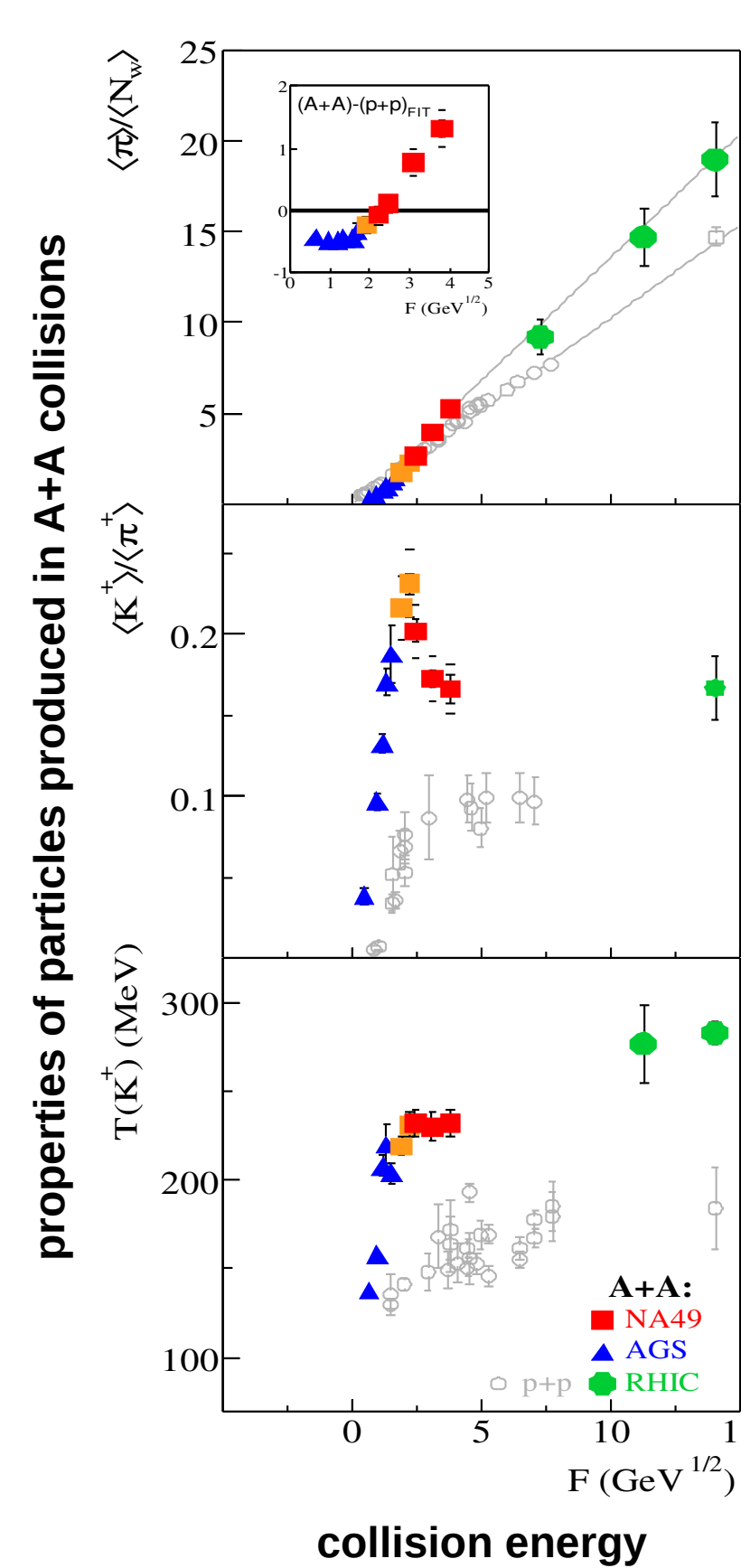
Properties of strongly interacting matter, its phases and transitions between them, are defined by strong interactions and can be uncovered only by study of nucleus-nucleus collisions



Snapshot of a very dense strongly interacting matter produced in A+A collisions at the CERN SPS (scale 10^{-14} m)

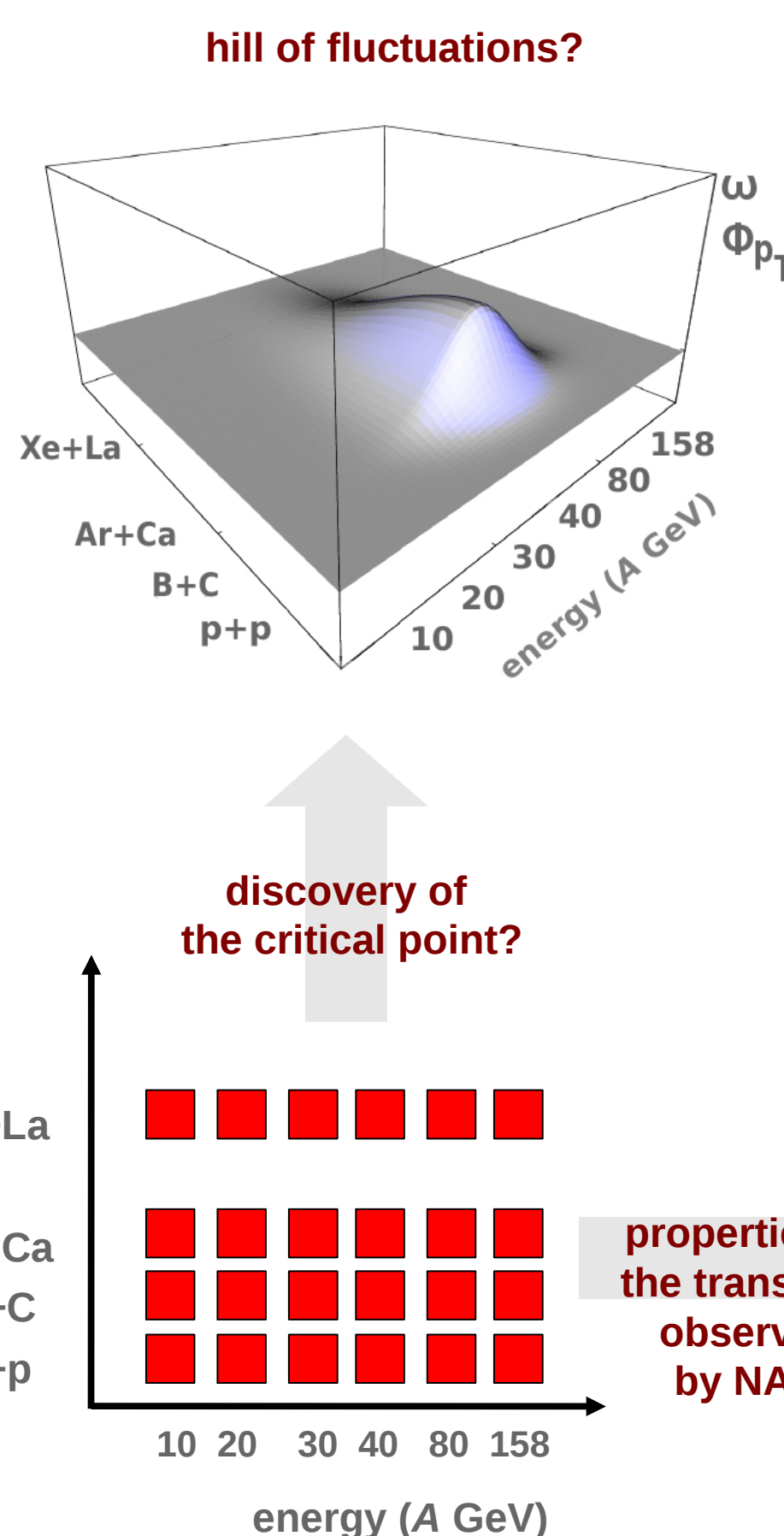
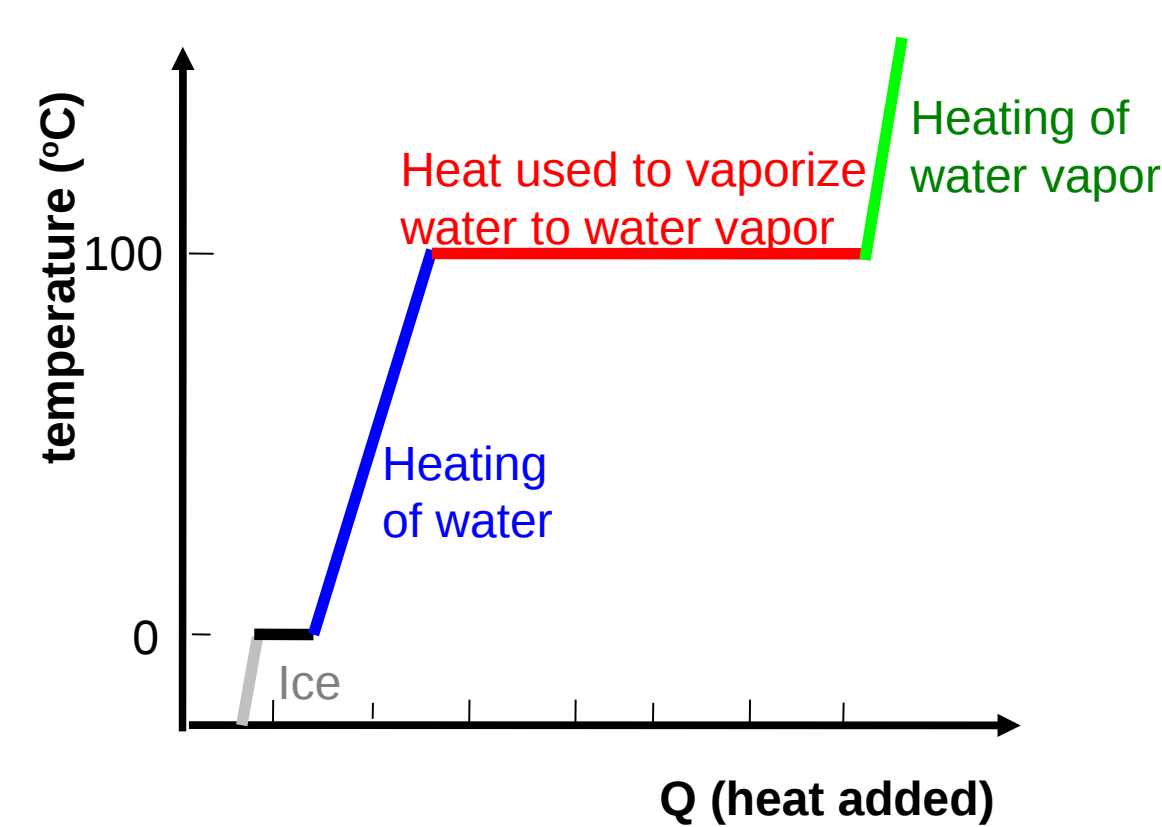


Tracks produced by collision products in the NA61 detector (p+p interaction at 158 GeV, scale 10 m)



Heating curves of strongly interacting matter measured by NA49 at the CERN SPS serve as evidence for a transition between hadron gas and quark gluon plasma

similar heating curve of water shows the transitions between different phases of water



NA61/SHINE performs a comprehensive scan in energy and size of colliding nuclei. It will uncover properties of the transition between hadron gas and quark gluon plasma and it may lead to the discovery of the critical point of strongly interacting matter

