

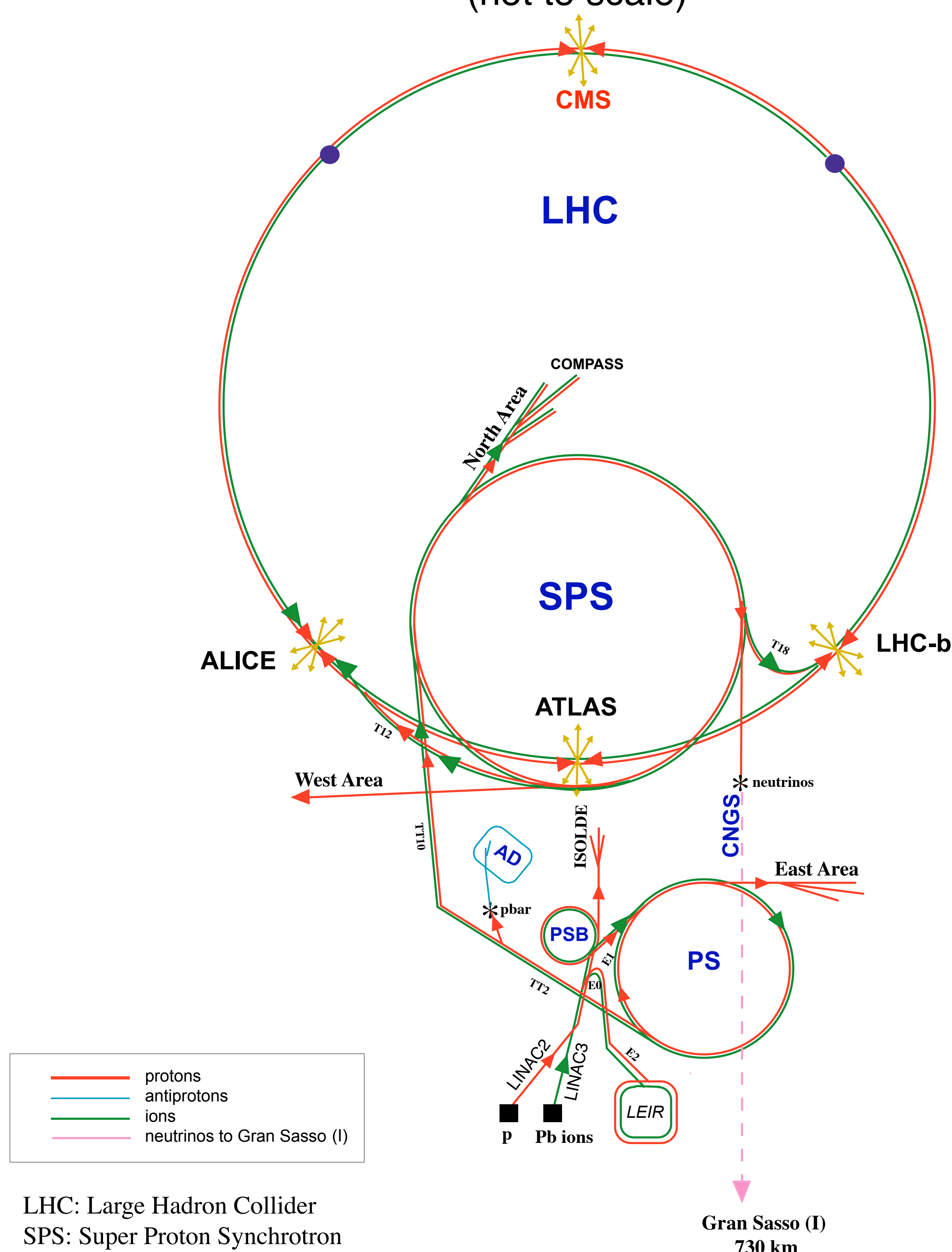
CERN is the world's largest laboratory for particle physics.

Founded in 1954, the Laboratory was one of Europe's first joint ventures, and has become a shining example of international collaboration.

From the original 12 signatories of the CERN convention, membership has grown to the present 20 Member States.



CERN Accelerators
(not to scale)



LHC: Large Hadron Collider
SPS: Super Proton Synchrotron
AD: Antiproton Decelerator
ISOLDE: Isotope Separator OnLine DEvice
PSB: Proton Synchrotron Booster
PS: Proton Synchrotron
LINAC: LINear ACcelerator
LEIR: Low Energy Ion Ring
CNGS: Cern Neutrinos to Gran Sasso

Rudolf LEY, PS Division, CERN, 02.09.96
Revised and adapted by Antonella Del Rosso, ETT Div.,
in collaboration with B. Desforges, SL Div., and
D. Manglunki, PS Div, CERN, 23.05.01

By accelerating particles to very high energies and smashing them into targets, or into each other, physicists can unravel the forces acting between them.

Crashing particles into each other inside colliders - or into targets - produces new particles. This happens as matter turns into energy and back again following Einstein's famous equation, $E=mc^2$