

**JUAS – February 20, 2020**

# The Electron-Ion Collider

François Méot

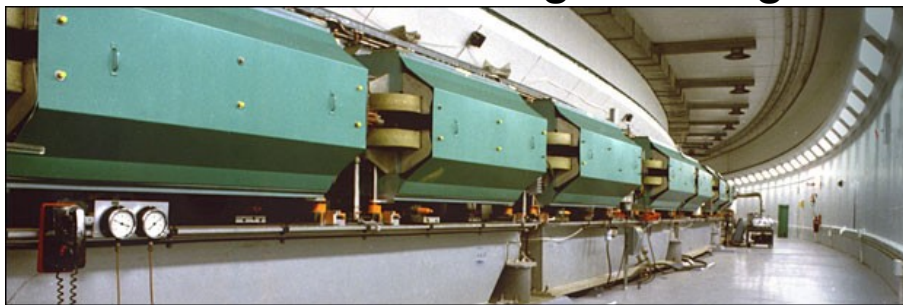
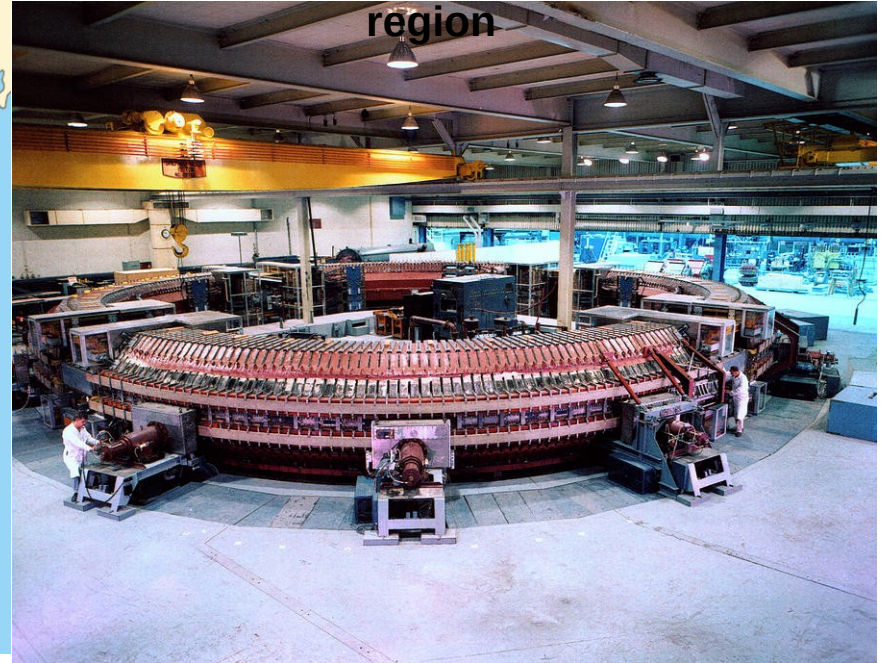
Accelerator Physics

Collider-Accelerator Department

Brookhaven National Laboratory



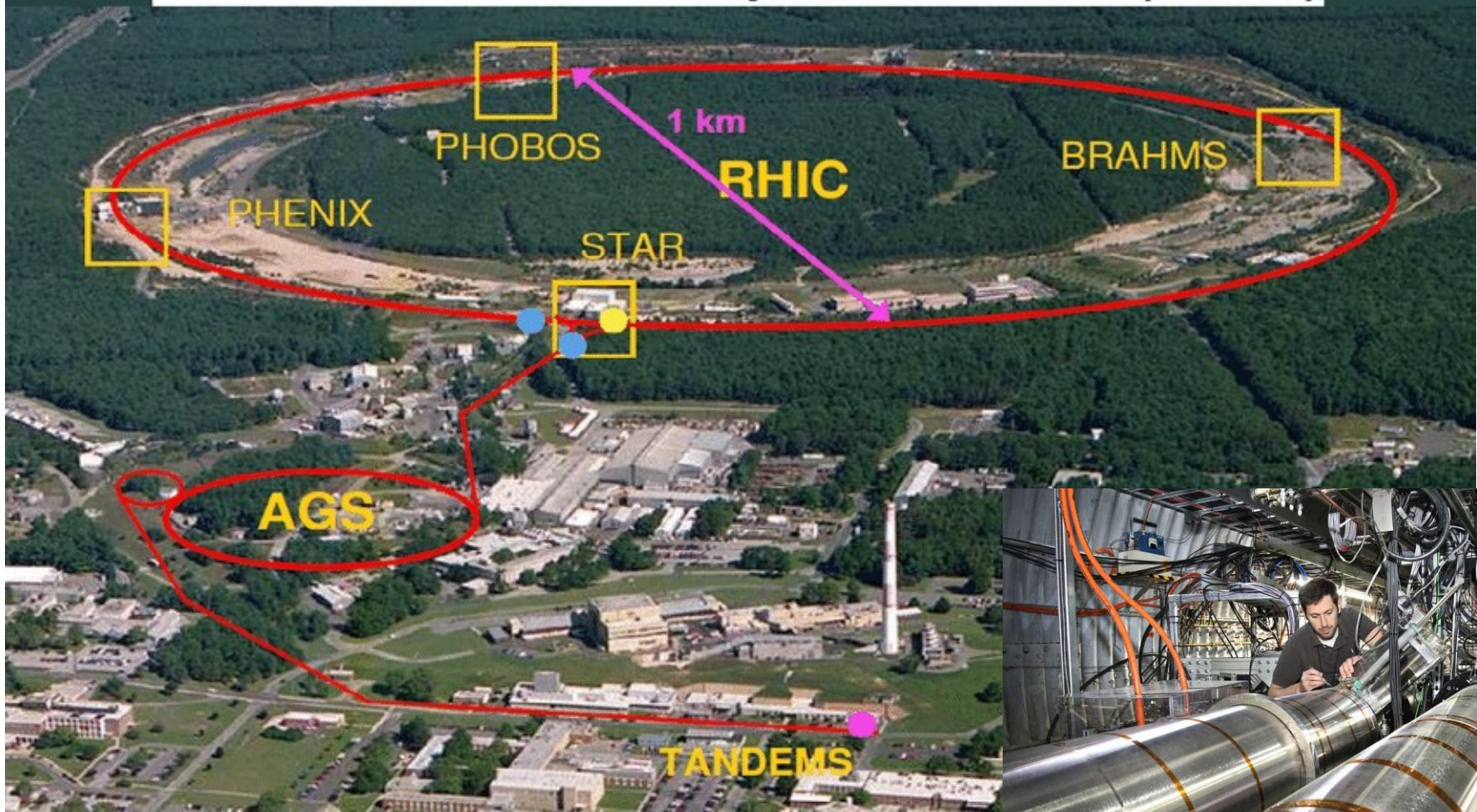
## First acceleration to energies in the GeV region



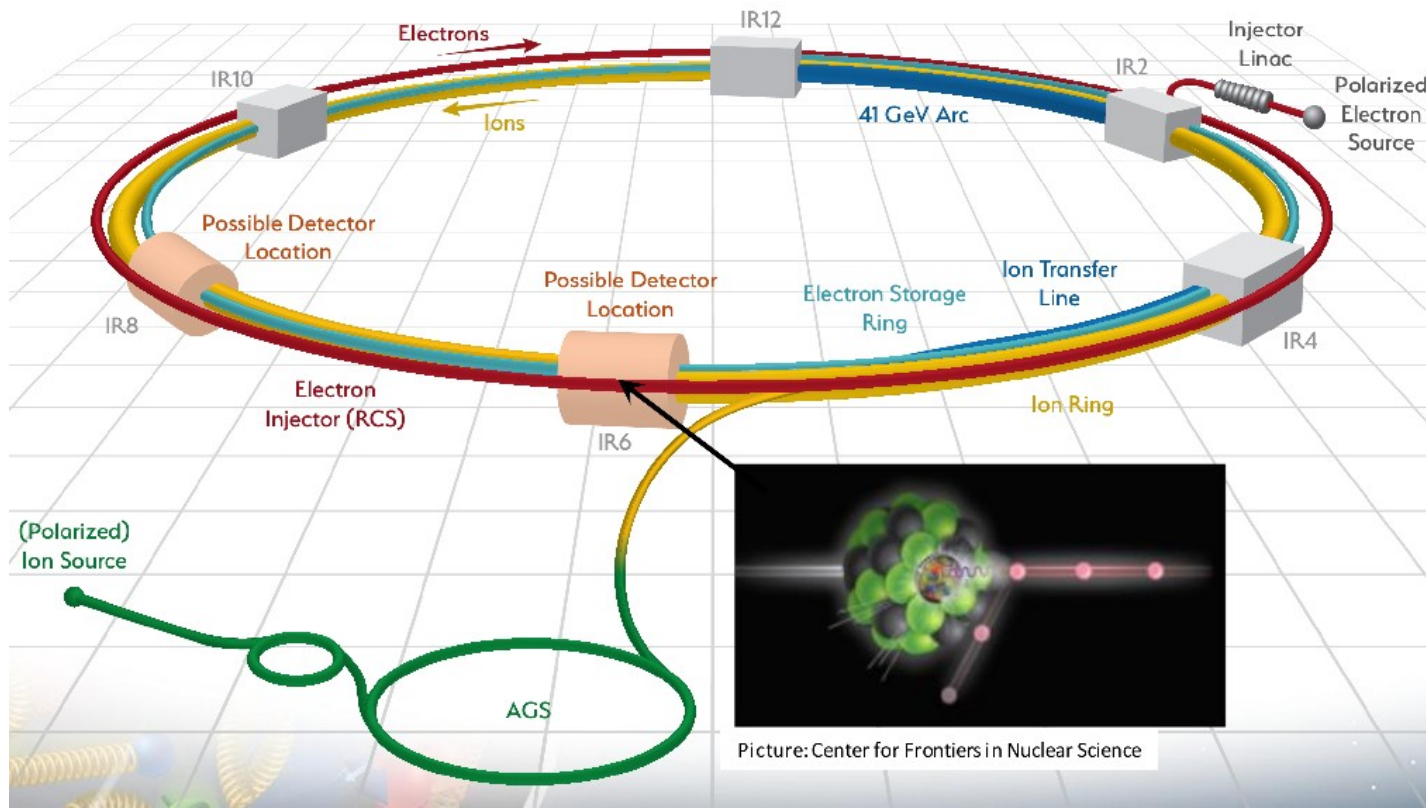
# BNL – A US DOE Lab - 1947

- About 3000 staff, 4000 guests every year
- Nuclear and high-energy physics
- Physics and chemistry of materials
- Environmental and climate research
- Nanomaterials
- Energy
- Nonproliferation
- Structural biology
- Accelerator physics

# The Relativistic Heavy Ion Collider (RHIC)



January 9, 2020, announcement by DOE: BNL to host the EIC.  
Facility estimated to cost between \$1.6B and \$2.6B.  
Opportunities open up for PhD, postdoc, careers in accelerators.



**Designed to collide polarized electron and ion beams**  
**Study the properties of nuclear matter in detail via deep inelastic scattering**