## EIC in a nutshell

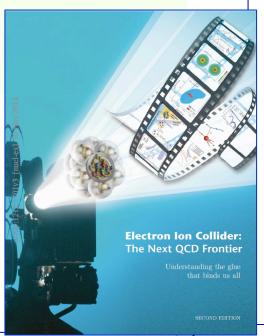
## EIC - Electron-Ion Collider - POLARIZED e, POLARIZED p & heavy ions !!!

- Scientific Highlights
  - Nucleon Spin and its 3D Structure and Tomography
  - g saturation in nuclei, q and g in nuclei
  - Beyond SM with electroweak physics
- recommendation by the U.S. NP community in the 2015 Long Range Plan:

EIC is the highest priority for new facility construction NAS (National Academy of Science) review on going

**Starting physics in ~ 2027** 

- 2 options for the collider:
  - eRHIC @ BNL
    - $_{\square}$  1.3-21 Gev (e), 25-250 GeV (p),  $L: 10^{33}-10^{34} \, \text{/cm}^2\text{/s}$
  - MEIC @ Jlab
    - □ 3-12 Gev (e), 25-100 GeV (p), 10<sup>34</sup> /cm<sup>2</sup>/s (later, 10<sup>35</sup>)



## EICUG meeting in Trieste, July 2017

- EICUG EIC User Group (<a href="http://www.eicug.org/web/">http://www.eicug.org/web/</a>)
  - The community supporting EIC
  - 685 inscribed so far (experimentalists and theorists) 54 from INFN
- Previous meetings: Jun 2014, Stony Brook Jan 2016, Berkley Jul 2016, Argonne
  - Agenda: <u>physics</u> <u>detectors</u> <u>accelerators</u>

INFN initiative towards the formation of an international community

The JULY 2017 meeting of the EICUG will be host at INFN – Trieste 18-22 July 2017

Web site: eicug2017.ts.infn.it/

- Goals:
  - Offer an opportunity to the whole INFN to learn more about open to everyone!
  - Allow the interested INFN physicists to start forming a coherent community
  - More in general: offer an opportunity to European scientists to get in contact with EIC