



## VIDEO Colloquium:

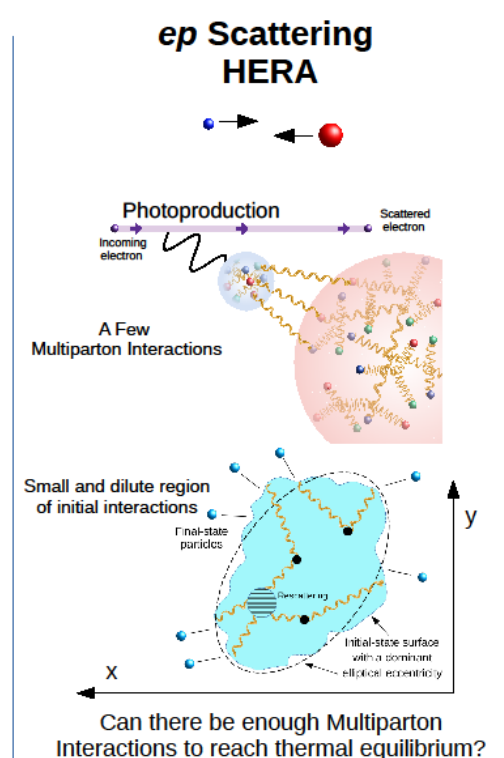
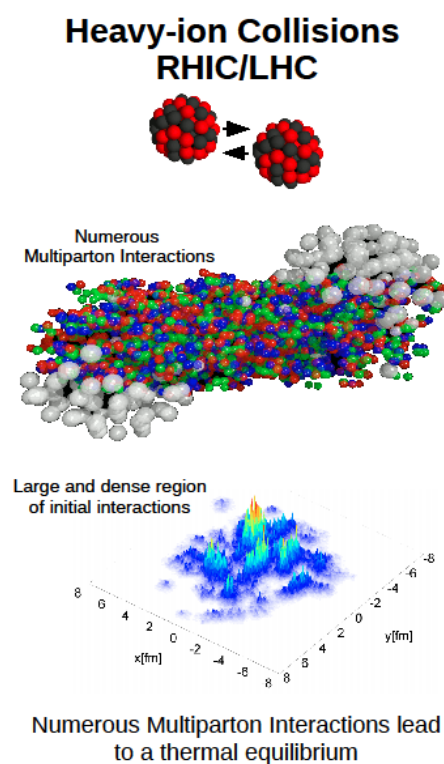
# Can we see the quark-gluon plasma at HERA?

Tuesday, 07 September, 2021

Webcast 16:00 h

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Many measurements in high-energy heavy-ion collisions indicate the formation of a new state of matter where quarks and gluons are in a deconfined and thermally equilibrated state. This state of matter – the quark-gluon plasma (QGP) – filled the entire universe during the first few microseconds after the Big Bang. The start of the LHC brought new and surprising observations, which indicated that a QGP might also form in much smaller p+p colliding systems. Scattering of electrons on protons at HERA provides even smaller colliding systems. Azimuthal correlations of the final-state hadrons are known to be sensitive to the QGP and are measured in deep inelastic scattering and photoproduction using the ZEUS detector. The measurements are also sensitive to multiparton interactions, which are a key prerequisite for the formation of a QGP.



**Zoom connection details:**

**Meeting ID: 996 1652 8733**  
**Meeting Password: 733220**

