

Trying To Communicate the “Big Picture”

- Several layers of audience:

- Us (“preaching to the choir”)
- Other Nuclear Physicists
- Other Physicists
- Muggles

These arguments aren’t all that different:

- *You can’t really pitch it too low* – people like to be told they already know!
- People will be turned off if they don’t understand your explanation because it makes them feel stupid!

- Be realistic, be honest, but be bold!

“Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work.” Daniel Burnham (1846-1912)

- Emphasize the road to the EIC as the *culmination* of a strong US program to study QCD:

- RHIC (HI and spin)
- JLab 12 GeV

It would be great to develop a combined RHIC/JLab/EIC timeline!
“Long term plan for the US QCD program”

Arguments for Spin (and the EIC?)

- Spin is a fundamental property that arises from the marriage of quantum mechanics and relativity – as such it reflects the underlying symmetries of spacetime.
- We use the spin of a strongly-interacting, relativistic, many-body system (the proton) *as a tool* to study its *structure*.
 - The vacuum as a “color superconductor” ...
- I think we can get a lot of play out of two starting points:
 - “Emergent Phenomena”: How do hadrons, nuclei and all of “traditional” nuclear physics arise from a simple set of “rules” (the QCD Lagrangian)?
 - Maybe this is too close to “mass” and “deconfinement”?
 - “Tomography of Nuclear Matter”: The analogy of “scanning” a hadron as a function of kinematic variables in the same way you CT scan a person is a *very powerful communication tool*.

A bold vision cuts short the “so what” arguments!

A Test...

- How would your science sound if narrated by Morgan Freeman?

Many other fields (astrophysics, string theory, Higgs physics, ...) have managed to capture the public imagination by boldly speculating on what exciting new things we can learn about the nature of the universe. Why should we be timid?

