Dear Roberto,

here are some comments to your nice talk.
Slide 2: maybe this is a too detailed outline for a 15 min talk

[R+] indeed, this slide is actually useless for the talk and I will remove it.

[Elke] :) good move ;)

slide 5: where does this upper right box come from. this is simply not true, maybe what the author wanted to say is that most EIC physics can be doen with a luminosity of 10^33, one needs different beam spcies, different enrgy nd also different polarisation states, such one cannot do all of this in 10fb^-1

[R+] the statement comes from both the Yellow Report (page 18, see attached screenshot) and there are similar citations of 10 fb^{-1} integrated luminosity in the EIC machine CDR (of which I attach a few screenshots as well). most of the figures in the White Paper and studies of statistical precision in there are with 10 fb^{-1} integrated luminosity, with a few exceptions up to 100 fb^{-1}. if we are uncomfortable with the statements I can remove it from the slide. it makes it a bit more complicated to justify what was the driver for the radiation damage studies (why up to 10^{11} ?) and where one could put the expectations, though. I use this statement to justify that 10^{11} in neutron equivalent fluence is something much beyond the physics goals of the EIC and in the R&D was used as a limiting damage.

**[Elke] yes, but 10fb^-1 per beam energy combination not just integrated overall as the one talking about the GPDs and the 100 fb-1 says.
The quote you have makes it sound it is 10fb^-1 for a total integrated lumi, this is not correct.
Delete it and formulate something yourself
Like serval physics goals defined by the NAS required an integrated luminosity per center of mass energy and polarization setting. the imaging program is more luminosity hungry and requires 100fb^-1 per center of mass energy and polarization setting.**

I also do not understand the numbers and your conclusion from the plot you show.

[R+] from the ePIC background study, in the dRICH photosensors region the neutron fluence for 6 months at max lumi (10^{34}) is ~ 3.5 x 10^{9} neq/cm². 6 months at max lumi corresponds to ~ 160 fb $^{-1}$ integrated luminosity. so, the fluence per integrated luminosity is ~ 2.2 x 10^{7} neq/cm²/fb^{-1}. which is a number in line with studies at the Yellow Report, where a 1-5 x 10^{7} neq / cm² / fb^{-1} value was the initial driver for the SiPM R&D studies. to be conservative I multiply by a safety factor of two, reaching the 4.5 x 10^{7} neq/cm²/fb^{-}1. with this number, I estimate how much integrated luminosity is needed to reach the 10^{11} limit we have chosen for the SiPM R&D. to reach 10^{11} neutron fluence one needs to integrate 2000 fb^{-1} of luminosity. at a rate of 160 fb^{-1} a year running always at the maximum luminosity (will not happen) it would take 12 years. 4.5 x 10^{7} neq/cm²/fb^{-}1. is also a relevant number for slide 11 for the conversion between physics (integrated luminosity) and SiPM damage (neutron equivalent fluence). maybe I could make my life easier and cut short with the slide by just stating what is the expected neutron fluence after 100 fb^{-1} integrated luminosity? that would be ~ 5 x 10^{9}.

[Elke] I think you do not need all thsi argument, just say in 10-12 years the EIC will accumulate 1000 fb^-1 corresponding to integrate fluence of XXX
Alo does one really want to run 10y with the same SiPMs? I guess no if better ones with lower noise come out.

slide 9: you never explain what DCR is

[R+] now it is "dark count rate" in the plots.

Cheers elke