



HI in FCC-hh Phys. Rep.

November 26, 2015

Input from M.Mangano

- ◆ Timeline:
 - First draft by the end of the year
 - Final before FCC week, Rome, April 11-15 2016
<http://fccw2016.web.cern.ch>
- ◆ Various chapters can go to arXiv independently
- ◆ Eventually merged to Yellow Report
- ◆ Expected page budget ~100 pages for most chapters
- ◆ No tight page limitation for HI → target 30-35 pages?
- ◆ Latex structure and templates in Dropbox

Outline for discussion

1. Introduction (**Urs**), 2 pages
2. Machine parameters and performance (**Silvia, Andrea**), 2-3 pages
3. QGP studies: bulk properties and soft observables (**Urs**), 4-5 pages
4. QGP studies: hard probes, ~10 pages
 1. Hard cross sections at 39 TeV, incl. top (**Carlos, David**), 3-4 pages
 2. Novel jet quenching studies (**Carlos**), 2-3 pages
 3. Heavy flavour, incl. transport and thermal charm, onia? (**Andrea**), 3-4 pages
5. Small-x and nPDF studies (**Nestor, Marco, David**), ~9 pages
 1. Small-x and nPDF in pA and AA collisions, incl. top and EW, 6-7 pages
 2. Photo-production of heavy quarkonia, 2-3 pages
6. Contributions to other sectors of high-energy physics (**David**), ~10 pages
 1. Higgs production, 3-4 pages
 2. Photon-photon scattering, 3-4 pages
 3. Connection with UHE cosmic-ray physics, 3-4 pages
7. Detector considerations, 1 page
8. Summary (**Urs, Andrea**), 1 page

→ ~35-40 pages