



UDLAP[®]

Introduction: The low x , Saturation, and Diffraction White Paper

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Snowmass EF06: Low x , saturation, diffraction white paper

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Idea

- Summarize the activities of the community
- Outline and sum up necessary measurements, but also necessary theory efforts
- Compact contributions, 2-4 pages, including figures
- To be submitted to OverLeaf (you should have all received the link, please report problems etc to us directly)
- References using BibTeX, Deadline: 15th of February [Snowmass deadline: 15th of March]

Contributions:

Contributions:

Diffractive measurements (jets...), gap between jets

MN jets

Diffractive $t\bar{t}$, etc:

TMD gluon distribution, saturation, semi hard

Forward jets, semi hard processes, TMD factorization

Minijets

Anomalous coupling studies

UPC physics

PPS/AFP at high lumi

FOCAL in Alice

$t\bar{t}$ as a tool to see saturation

Towards intermediate x

TMD distributions and saturation

Low x evolution with vector mesons

J/Psi studies

Non-elastic contribution in photon-photon physics

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Note:

- Titles are preliminary (as we interfered them from your contributions and/or recent work) — please adapt as needed and appropriate (also let us know in your talk in case you're covering a slightly different topic)
- Please try to coordinate with other contributions, in case they address very similar/identical topics
- Please add your affiliations and funding agencies to the OverLeaf document
- All members of the EF06 are invited to sign the white paper (we will let you now when this will occur)

Contributions which potential overlap

Unintegrated gluon distribution & TMD factorization

- TMD gluon distribution, saturation, semi hard processes
- Forward jets, semi hard processes, TMD factorization
- TMD distributions and saturation
- J/Psi studies
- Towards intermediate x
- t tbar as a tool to see saturation

Jets as a tool to explore the BFKL

Green's function

- MN jets

Fundamental questions about QCD dynamics which can be probed in (very) forward kinematics (Mark Strikman)

Diffraction

- Diffractive measurements (jets...), gap between jets
- Diffractive t tbar, etc:

Photons at the LHC

- UPC (summary)
- Exclusive t tbar, WW, ZZ, gamma Z, gamma gamma and anomalous coupling studies
- Low x evolution and vector mesons
- Non-elastic contribution in photon-photon physics

Detectors etc.

- PPS/AFP at high lumi
- FOCAL in Alice

Comments, Questions,

Please send your contributions now, latest till the weekend (time is running)

Thanks to everybody for their availability to contribute on a short time scale