



UDLAP[®]

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

Christophe Royon, Martin Hentschinski
christophe.Royon@cern.ch, martin.hentschinski@gmail.com

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

Authors:

Cristian Baldenegro, Christophe Royon

Agustin Sabio Vera, Grigorios Chachamis, Mats Kampshoff

Michael Pitt

Francesco Celiberto, Alessandro Papa, Michael Fucilla

Krzysztof Kutak, Andreas van Hameren, Piotr Kotko, Sebastian

Mark Strikman

Cristian Baldenegro

Daniel Tapia Takaki, Christophe Royon, Michael Pitt

Michael Pitt

Constanin Loizides

Georgios Krintiras

Jamal Jalilian-Marian

Samuel Wallon, Lech Szymanowski, Renaud Boussarie

Martin Hentschinski

Maxim Nefedov

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

Jets as tools to explore the BFKL

Green's function

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

- Towards intermediate x

- Minijets

Top as a probe

- t tbar as a tool to see saturation
- Diffractive t tbar, etc:

Photon physics

- UPC
- Exclusive t tbar, WW, ZZ, gamma Z, gamma gamma and anomalous coupling studies
- Low x evolution and vector mesons

Detectors etc.

- PPS/AFP at high lumi
- FOCAL in Alice

Comments, Questions,

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