Status Update for Inclusive Reactions Group

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Inclusive Reactions can be divided naturally into 7 subgroups

I. Polarized PDFs
- $\Delta g(x,Q^2)$ from inclusive $A_{||}$
- $\Delta s(x,Q^2)$ from A_{PV}
- Bjorken Sum Rule
- $\boldsymbol{\alpha}_s$ strong coupling constant

II. Unpolarized nucleon PDF
- $g(x, Q^2)$ and $f(x, Q^2)$ from F_2, F_L and $F_2^{c/b}$
- $\boldsymbol{\alpha}_s$ strong coupling constant

III. Non-linear QCD Dynamics
- Non DGLAP behavior
- Higher twist effects

IV. Nuclear PDFs
- $f(x,Q^2)$ and $g(x, Q^2)$ from F_2, F_L and $F_2^{c/b}$

V. Precision Electroweak and BSM Physics
- $\sin^2\boldsymbol{\theta}_w$ from A_{PV}
- Charged Lepton Flavor violation via $e \rightarrow \boldsymbol{\tau}$ (?Jet?)

VI. Pion PDFs from tagged DIS (TDIS)
- $F_2^{LN}(x,Q^2,x_L)$ with tagged neutron/Lambda

VII. Lorentz and CPT Violating Effects
- Neutral current differential cross-section

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Identified interest to date.

I. Polarized PDFs
- Bernd Surrow, Amilkar Quintero, Matt Posik, Jae Nam, Nickolas Lukow, Emanuele Nocera, Wally Melnitchouk, Xiaoxuan Chu, Rodolfo Sassot, Krishna Kumar, Daniel de Florian, Jacob Ethier, Abhay Deshpande, Filippo Delcarro

II. Unpolarized nucleon PDF
- Astrid Morreale, Bernd Surrow, Amilkar Quintero, Matt Posik, Jae Nam, Nickolas Lukow, Emanuele Nocera, Wally Melnitchouk, Rabah Abdul Khalek, Pavel Nadolsky, Tim Hobbs, C.-P. Yuan , Xiaoxuan Chu , Rodolfo Sassot , Daniel de Florian, Jacob Ethier, Francesco G. Celiberto

III. Non-linear QCD Dynamics
- Abhay Deshpande, Christian Weiss

IV. Nuclear PDFs
- Astrid Morreale , Pia Zurita, Rabah Abdul Khalek, Wally Melnitchouk, Pavel Nadolsky, Tim Hobbs , Xiaoxuan Chu , Jacob Ethier

V. Precision Electroweak and BSM Physics
- Tim Hobbs, Krishna Kumar, Abhay Deshpande, Caryn Palatchi

VI. Pion PDFs from tagged DIS (TDIS)
- Wally Melnitchouk, Aurore Courtoy, Tim Hobbs

VII. Lorentz and CPT Violating Effects
- Nathan Sherrill, Enrico Lunghi

Initial Plan for Temple Meeting

- Roundtable-type discussion with informal presentations for each physics subgroup
- Discussion with BNL & Jlab detector/accelerator experts on reasonable resolution/systematics assumptions for our studies

Questions?

- What luminosity should we assume? 10 fb-1?
- Where does tagged DIS live?
- Where does CFLV e->τ channel live?
- Will be wiki pages provided?