Fifth workshop on ”Perceiving the Emergence of Hadron Mass through AMBER@CERN” (EHM2021/9)

Wednesday, 21 April 2021 - Friday, 30 April 2021

Book of Abstracts
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Introductory talk

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Day I - Introduction / 8

Probing EHM with AMBER

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Approved measurements / 9

Charged proton-radius measurement

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Approved measurements / 10

Antiproton cross-section measurements for Dark Matter search

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Probing the pion’s parton structure at AMBER

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Envisaged measurements / 12

Probing the kaon’s parton structure at AMBER Phase-2

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Measuring excitacion spectra in K pi pi final states with AMBER Phase-2
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Measuring the Primakoff reaction and $F_{\{K2pi\}}$ with AMBER phase-II

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Day I / 15

Can AMBER Phase-2 access the charge radius of pion or/and kaon?

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Can AMBER Phase-2 access Moments of pion/kaon Distribution Amplitudes in Diffractive Scattering?

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Day II / 17

Lattice QCD for AMBER

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Meson DFs from Lattice QCD

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Day III / 19

Pion DAs in AMBER

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Day II / 20

**EHM via Meson GPDs**

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Day II - / 21

**Basic EHM from Lattice QCD**

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Day II - / 22

**Pion structure as a problem in Minkowski space**

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Day II - / 23

**Basis light-front quantisation**

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**Discussion**

Day III / 25

**NNPDFs for meson structure**

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Day III / 27

**Accessing pion’s large-x gluon by fixed-target charmonium production**

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Day III / 28

**EHM via meson light-front wave functions - Part 1**

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**EHM via meson light-front wave functions - Part 2**

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Day II / 30

**High-energy factorization for DY with new TMD (unintegrated) PDFs**

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**Discussion**

Day IV / 32

**EHM and the spectrum of light mesons**

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Day IV / 33

**EHM as revealed by the spectra of baryons with heavy quarks**

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**Synergies with EHM at Jlab**

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Model independent extraction of hadron radii

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Day IV - Round table / 36

Round-table discussion

Wolf-Dieter Nowak / Craig Roberts
Stephane Platchkov
Vincent Andrieux
Andrii Maltsev
Boris Grube
Jan Friedrich
Oleg Denisov
...
and all other participants