

# Exposing Novel Quark and Gluon Effects in Nuclei

ECT\* workshop program, 16–20 April 2018

## Monday

09:00–09:30 **Registration**

09:45–10:00 **ECT\* Director's Welcome – Prof. J. Wambach**

Chair: Seamus Riordan talks 35+10 mins

10:00–10:45 Recent and Future Measurements of the EMC Effect with Inclusive Electron Scattering David Gaskell

10:45–11:15 **Coffee**

11:15–12:00 High-x opportunities at a fixed target experiment using the LHC beams (AFTERLHC) Ingo Schienbein

12:00–13:30 **Lunch**

Chair: Whitney Armstrong talks 35+10 mins

13:30–14:15 Gluon structure of nuclei from lattice QCD Phiala Shanahan

14:15–15:00 Nuclear Parton Distributions from nCTEQ Cynthia Keppel

15:00–15:30 **Coffee**

15:30–16:15 3D Partonic Structure of Nucleons and Nuclei Mohammad Hattawy

16:15–17:00 Fitting nPDFs: strategies and results Maria Zurita

Chair: Raphaël Dupré

17:00–17:30 **Discussion**

## Tuesday

Chair: Nadia Fomin talks 35+10 mins

09:15–10:00 Studying the Isovector EMC Effect with Parity Violating Electron Scattering Seamus Riordan

10:00–10:30 **Coffee**

10:30–11:15 Dimuon Production and Nuclear Effects Stephane Platchkov

11:15–12:00 TBA Paul Reimer

12:00–13:30 **Lunch**

Chair: Raphaël Dupré talks 35+10 mins

13:30–14:15 TBA William Brooks

14:15–15:00 Quark structure of nuclei William Detmold

15:00–15:30 **Coffee**

15:30–16:15 Spin physics with a polarized deuteron Mohammad Hattawy

16:15–16:45 Hadronization at EIC: Looking at heavy quarks Mathieu Ehrhart

Chair: Paul Reimer

16:45–17:15 **Discussion**

## Wednesday

Chair: Ian Cloët talks 35+10 mins

09:15–10:00 The QCD Energy Momentum Tensor in Nucleons and Nuclei Simonetta Luiti

10:00–10:30 **Coffee**

10:30–11:15 TBA Raphaël Dupré

11:15–12:00 A covariant calculation of deuteron GPDs Adam Freese

12:00–13:30 **Lunch**

## Thursday

|   |                   |
|---|-------------------|
| Chair: Seamus Riordan   | talks 35+10 mins  |
| 09:15 – 10:00 Previously, on Short-Range Correlations experiments                                   | Nadia Fomin       |
| 10:00 – 10:30 <b>Coffee</b>   |                   |
| 10:30 – 11:15 EMC effect in 2018  | Gerald Miller     |
| 11:15 – 12:00 Flavor Dependence of Nuclear Modifications  | Misak Sargsian    |
| 12:00 – 13:30 <b>Lunch</b>  |                   |
| Chair: Adam Freese  | talks 35+10 mins  |
| 13:30 – 14:15 TBA   | John Arrington    |
| 14:15 – 15:00 From Nuclei to neutron stars: starting at the quark level                             | Anthony Thomas    |
| 15:00 – 15:30 <b>Coffee</b>   |                   |
| 15:30 – 16:15 A Poincaré covariant light-front spectral function for the study of nuclear structure | Emanuele Pace     |
| 16:15 – 17:00 TBA   | Whitney Armstrong |
| Chair: Nadia Fomin  |                   |
| 17:00 – 17:30 <b>Discussion</b>   |                   |

## Friday

|   |                  |
|---|------------------|
| Chair:  | talks 35+10 mins |
| 09:30 – 10:15 Nuclear generalized parton distributions and DVCS off Helium nuclei | Sergio Scopetta  |
| 10:15 – 10:45 <b>Coffee</b>   |                  |
| 10:45 – 11:30 From the Coulomb Sum Rule to the EMC effect                         | Ian Cloët        |
| Chair: Seamus Riordan   |                  |
| 11:30 – 12:00 <b>Discussion &amp; Close</b>                                       |                  |
| 12:00 – 13:30 <b>Lunch</b>  |                  |