INT Program on EIC Physics, INT-18-3 Oct. 1- Nov. 16, 2018

- Probing Nucleons and Nuclei in High Energy Collisions (INT-18-3)
  October 1 - November 16, 2018
  Y. Hatta, Y. Kovchegov, C. Marquet, A. Prokudin

- Institute for Nuclear Theory, Seattle, WA

OCTOBER 1 – NOVEMBER 16, 2018 • SEATTLE, WASHINGTON

PROBING NUCLEONS AND NUCLEI IN HIGH ENERGY COLLISIONS
Dedicated to the Physics of the Electron Ion Collider

Program held at the Institute for Nuclear Theory, supported by the US Department of Energy
http://www.int.washington.edu/PROGRAMS/18-3

ORGANIZERS
Yoshitaka Hatta, Kyoto University/BNL
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PROGRAM STRUCTURE

| Week 1          |October 1-5|          | Week 2          |October 8-12|          | Week 3          |October 15-19|          | Week 4          |October 22-26|          | Week 5 & 6 |October 29 Nov 9|          | Week 7          |November 12-16|          |
|-----------------|-----------|----------|-----------------|------------|----------|-----------------|------------|----------|-----------------|------------|----------|------------|----------------|----------|------------|
| Generalized parton distributions |           |          | Transverse spin and TMDs |           |          | Longitudinal spin |           |          | Symposium week |           |          | eA collisions |           |          | pA and AA collisions |           |          |
| Conveners:      |           |          | Conveners:      |           |          | Conveners:      |           |          |                 |           |          |            |           |          | Conveners:   |           |          |
| Targa Tonni     |           |          | Matthias Rasch |           |          | Uli J. Wiedemann|           |          |                 |           |          |            |           |          | Cleo Risch   |           |          |
| Andreas Metz    |           |          | Alessandra Bicchetta |           |          | Cédric Lépine |           |          |                 |           |          |            |           |          | Anna Störs  |           |          |
| Christian Nold  |           |          | Daniele Bassi   |           |          | Mario Diethmann |           |          |                 |           |          |            |           |          | Thomas Huf    |           |          |
| Zhongliang Xing |           |          |                 |           |          |                 |           |          |                 |           |          |            |           |          | Bowen Hao    |           |          |

A five day symposium will be held during the entire week covering all the major topics related to the EIC.
An Assessment of U.S.-Based Electron-Ion Collider Science

“The committee finds that the science that can be addressed by an EIC is compelling, fundamental and timely.”
2018 INT workshop

http://www.int.washington.edu/PROGRAMS/18-3/

Goal: assess the current status of the EIC-related physics (theory/phenomenology), with the aim of laying the groundwork for another EIC White Paper, to be presented in preparation to the next NSAC Long Range plan.

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Conveners</th>
<th># of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>October 1-5</td>
<td>Generalized parton distributions</td>
<td>Tanja Horn, Andreas Metz, Christian Weiss</td>
<td>25</td>
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<td>2</td>
<td>October 8-12</td>
<td>Workshop on Transverse spin and TMDs</td>
<td>Harut Avakian, Alessandro Bacchetta, Daniel Boer, Zhongbo Kang</td>
<td>37</td>
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<td>3</td>
<td>October 15-19</td>
<td>Longitudinal spin</td>
<td>Elke Aschenauer, Keh-Fei Liu, Cedric Lorce, Marco Stratmann</td>
<td>26</td>
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<td>4</td>
<td>October 22-26</td>
<td>Symposium week</td>
<td></td>
<td>35</td>
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<tr>
<td>5 &amp; 6</td>
<td>October 29-November 9</td>
<td>eA collisions</td>
<td>Giovanni Chirilli, Charles Hyde, Anna Stasto, Thomas Ullrich, Bowen Xiao</td>
<td>22 &amp; 25</td>
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<tr>
<td>7</td>
<td>November 12-16</td>
<td>pA and AA collisions</td>
<td>Adrian Dimitru, Francois Gelis, Tuomas Lappi, Yacine Mehtar-Tani</td>
<td>25</td>
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2018 INT Program

• Currently we have 123 people registered for the program (including 4 organizers and ~20 conveners). Mainly theorists, but with a healthy number of experimentalists.

• The program is 7 weeks long – a bit shorter than the 2010 program which was 10 weeks long. Hence we have a slightly faster pace.

• The program received generous support from JLAB and BNL with each of the labs supporting most of their participants.


• Talks will be broadcasted (remote participation by Zoom), recorded and posted (if the speaker permits) [https://zoom.us/j/9821312855](https://zoom.us/j/9821312855)
Plans

• Ultimately will put together “proceedings”, post them on the arXiv and publish them too.
Discussions

• Tuesday – new machines
• Thursday – open issues no-host discussion, please prepare 1-2 slides if you want to discuss anything
• Friday – future directions no-host discussion, please prepare 1-2 slides if you want to discuss anything
• Monday, Wednesday – if need be