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, Ayato University/BNL
Yuri Kovchegov, The Ohio State University
Cyrille Marquet, CPHT - Ecole Polytechnique
Alexei Prokudin, Penn State University Berks

PROGRAM COORDINATOR
Kimberlee Choe
jj24@uw.edu

PROGRAM STRUCTURE

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<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
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<tr>
<td>October 1-5</td>
<td>October 8-12</td>
<td>October 15-19</td>
<td>October 22-26</td>
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Generalized parton distributions
Conveners:
Tanja Horn
Andreas Metz
Christian Weiss

Transverse spin and TMDs
Conveners:
Hans-Alwin Barendui
Andrea Bacchetta
David Boer
Zhongyi Kang

Symposium week
A five-day symposium will be held during the central week, covering all the major topics related to the EIC

Conveners:
Gianluca Brumme
Charles Hyde
Anton Santos
Thomas Ullrich
Bowen Xiao

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<th>Weeks 5 &amp; 6</th>
<th>Week 7</th>
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<tr>
<td>Oct. 29 Nov. 9</td>
<td>November 12-16</td>
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eA collisions
Conveners:
Adria Dumitru
Francois Galls
Tomomi Egusa
Yacine Mekhfi Tazi

pA and AA collisions
Gluons and the quark sea at high energy distributions, polarization, tomography

September 13 to November 19, 2010

Report from the INT program "Gluons and the quark sea energies: distributions, polarization, tomography"

2010 INT workshop

REACHING FOR THE HORIZON

2015 Long Range Plan

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.”

2012 White paper

2018 NAS report
# 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.

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<th>Week 1 (October 1-5)</th>
<th>Generalized parton distributions</th>
<th>25</th>
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<tbody>
<tr>
<td>Conveners: Tanja Horn, Andreas Metz, Christian Weiss</td>
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<tr>
<th>Week 2 (October 8-12)</th>
<th>Workshop on Transverse spin and TMDs</th>
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<tr>
<td>Harut Avakian, Alessandro Bacchetta, Daniel Boer, Zhongbo Kang</td>
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<th>Week 3 (October 15-19)</th>
<th>Longitudinal spin</th>
<th>26</th>
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<tr>
<td>Elke Aschenauer, Keh-Fei Liu, Cedric Lorce, Marco Stratmann</td>
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<th>Week 4 (October 22-26)</th>
<th>Symposium week</th>
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<th>Weeks 5 &amp; 6 (October 29-November 9)</th>
<th>eA collisions</th>
<th>23 &amp; 24</th>
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<tr>
<td>Giovanni Chirilli, Charles Hyde, Anna Stasto, Thomas Ullrich, Bowen Xiao</td>
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<th>Week 7 (November 12-16)</th>
<th>pA and AA collisions</th>
<th>25</th>
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<tr>
<td>Adrian Dimitru, Francois Gelis, Tuomas Lappi, Yacine Mehtar-Tani</td>
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2018 INT Program

• Currently we have 116 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 will have a slightly faster pace.

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

• Wiki pages for each week to document discussions, to be maintained by conveners https://wiki.bnl.gov/EIC2018/index.php/Main_Page

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

• Wiki pages for each week to document important developments, to be maintained by conveners; https://wiki.bnl.gov/EIC2018/index.php/Main_Page plenty of INT-style discussions; identify key new measurements one can do at the EIC; try to achieve deeper understanding of existing observables;

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