Session Program

27-30 May 2025

MUSES Collaboration Meeting Section

Loomis Physics Building, University of Illinois Urbana-Champaign

Tuesday 27 May

| 09:00 | Section: Morning 1 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
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| | 09:00-09:30 What is MUSES? Short Overview (Nico Yunes) |
| 10:00 | 09:30-10:00 Calculation Engine & Cyberinfrastructure (Andrew Manning) |
| 11:00 | Section: Morning 2 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
| | 11:00-11:30 MUSES for Heavy Ion Collisions (Claudia Ratti) |
| | 11:30-11:45 MUSES workflow demonstration: single heavy-ion module (Johannes Jahan) |
| | 11:45-12:15 MUSES for Neutron Stars (Veronica Dexheimer) |
| 12:30 | 12:15-12:30 MUSES workflow demonstration: CMF+lepton+Beta+QLIMR (Mateus Pelicer) |
| 14:00 | Section: Afternoon 2 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
| 15:00 | 14:00-15:00 Future Directions of MUSES (Jaki Noronha-Hostler + Jorge Noronha) |
| 15:30 | Section: Afternoon 2 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
| 17:00 | 15:30-17:00 Discussion (Nico Yunes) |

Wednesday 28 May

| 09:00 | Section: Morning 1 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
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| 10:30 | 09:00-10:30 MUSES hackathon (Andrew Manning + Klaus or Carlos or Mateus for neutron stars + Johannes or Yumu for heavy-ion) |
| 11:00 | Section: Morning 2 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
| 12:30 | 11:00-12:30 Matching at finite temperature (Mauricio new matching + Tulio Restrepo Medina matching Holography to vdW HRG) |
| 14:00 | Section: Afternoon 1 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
| 15:30 | 14:00-15:30 Breakout session |
| 16:00 | Section: Afternoon 2 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
| 17:30 | 16:00-17:30 Neutron stars at finite temperature (Mateus CMF + Yumu NJL + Jiaxi NR) |

Thursday 29 May

| 09:00 | Section: Morning 1 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
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| 10:30 | 09:00-10:30 Thermal FIST + Observable modules (partial pressures/susceptibilities/transport coefficients) (thermal Feyisola + partial pressures Johannes + holography transport Musa) |
| 11:00 | Section: Morning 2 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
| 12:30 | 11:00-12:30 Breakout session |
| 14:00 | Section: Afternoon 1 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
| 15:30 | 14:00-15:30 Open discussion: What do you want in MUSES in the future? How do you want to use MUSES in the future? What do you want the cyberinfrastructure to do in the future (new application features, changes to API, integration of new computing resources)? |
| 16:00 | Section: Afternoon 2 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
| 17:30 | 16:00-17:30 Breakout session |

Friday 30 May

| 00 | Section: Morning 1 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
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| :30 | 09:00-10:30 Student/Postdoc Hackathon + Leadership Break-out Session |
| 0 | Section: morning 2 Session Location: Loomis Physics Building, University of Illinois Urbana-Champaign |
|) | 11:00-12:30 Student/Postdoc Hackathon + Break-out Session |