Plasma Astrophysics Workshop

At LANL, there is a diversity of ongoing plasma astrophysics related research activities. P-24 is organizing a one day workshop with the loose topic Plasma Astrophysics. We include nascent laboratory experiments, theory, computation, space satellite observation, and more.

**Strategic objectives**

1. Educate ourselves on the diversity of plasma astrophysics related research at LANL.
2. Identify timely topics in plasma astrophysics which can benefit from LANL experimental/theoretical collaboration, leading ultimately to high quality research proposals for submission to LDRD and external funding agencies (e.g., DOE-OFES, NASA, etc.).
3. Identify plasma astrophysics research areas that are tied to the stewardship mission (e.g., ASCI code validation).
4. Nurture and create new collaborative research with New Mexico and UCRD universities.

**Schedule & Location**

Friday, July 11, 8:00AM to 5PM, Motorola Building, AMTL Conference Room

**Contacts**

T. Intrator 5 2927 intrator@lanl.gov, S.Hsu 7 3386 scothsu@lanl.gov, I. Furno 5 2703 furno@lanl.gov

**Website**

http://wsx.lanl.gov/RSX/Astro_workshop/Astro_workshop_homepage.htm

**Format**

1. No registration fee!
2. 12 half hour talks (20 min + discussion time), provide overview of LANL experimental/theoretical/computational research in plasma astrophysics, space physics
3. panel discussion session
4. Good food and drink
5. We welcome non-invited and student contributions, and will schedule a poster session if warranted (no responses yet).
6. Required attendance for P-24 plasma physics summer school students

**Schedule**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>continental</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>AMP-24 welcome</td>
</tr>
<tr>
<td>8:45 AM</td>
<td>Prager Wisc perspective from outside LANL</td>
</tr>
<tr>
<td>9:15 AM</td>
<td>Li Magnetized Universe project, link to expemnts</td>
</tr>
<tr>
<td>9:45 AM</td>
<td>Wilde astrophysical jets</td>
</tr>
<tr>
<td>10:15 AM</td>
<td>Coffee, etc.</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>Colgate survey of experiments vs burning questions</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Kronberg search for magnetic structure</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Birn satellite data and computations</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>lunch in house by Hot Rocks</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Winske collisionless shocks</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Lapenta computations beyond MHD</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Wang MRI, dynamo, FMP experiment</td>
</tr>
<tr>
<td>2:30 PM</td>
<td>Coffee, etc.</td>
</tr>
<tr>
<td>2:45 PM</td>
<td>Tang collimated jets</td>
</tr>
<tr>
<td>3:15 PM</td>
<td>Intrator reconnection, kink, RSX experiment</td>
</tr>
<tr>
<td>3:45 PM</td>
<td>Cobble TRIDENT jet experiments</td>
</tr>
<tr>
<td>4:15 PM</td>
<td>panel discussion Colgate, Li, Prager, Intrator, Lapenta and/or ??</td>
</tr>
</tbody>
</table>

please register at the beginning or during the day so we know how many attendees