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 <u>intrator@lanl.gov</u>, S.Hsu 7 3386 scott<u>hsu@lanl.gov</u>, I. Furno 5 2703 <u>furno@lanl.gov</u> *Website* <u>http://wsx.lanl.gov/RSX/Astro_workshop/Astro_workshop_homepage.htm</u>

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

breakfast	8:00 AM	continental
Intrator	8:30 AMP-24	welcome
Prager	8:45 AMU Wise	c perspective from outside LANL
Li	9:15 AMX-1	Magnetized Universe project, link to expermnts
Wilde	9:45 AMX-2	astrophysical jets
break	10:15 AM	Coffee, etc.
Colgate	10:30 AMT-6	survey of experiments vs burning questions
Kronberg	11:00 AMIGPP	search for magnetic structure
Birn	11:30 AMNIS-1	satellite data and computations
lunch	12:00 PM	lunch in house by Hot Rocks
Winske	1:00 PM X-1	collisionless shocks
Lapenta	1:30 PM T-15	computations beyond MHD
Wang	2:00 PM P-24	MRI, dynamo, FMP experiment
break	2:30 PM	Coffee, etc.
Tang	2:45 PM T-15	collimated jets
Intrator	3:15 PM P-24	reconnection, kink, RSX experiment
Cobble	3:45 PM P-24	TRIDENT jet experiments
panel discussior	1 4:15 PM	Colgate, Li, Prager, Intrator, Lapenta and/or ??
please register at the beginning or during the day so we know how many attendees		