

JINA collaborations & conferences

Goal of JINA is to initiate a broad spectrum of collaboration to maximize expertise and input to address specific research goals addressed by MRC1 and MRC2!

Goal of JINA is to develop a series of goal oriented conference and workshops within the framework of MRC1 and MRC2!



JINA - Collaborations in 2003

Reflects historical evolution from independent research groups towards joint JINA efforts!

- □ ⁶⁸Se mass measurements at ATLAS/ANL rp-process in type I XRBs; ND-ANL collaboration
- ⁷⁸Ni β-decay & lifetime measurement at NSCL/MSU r-process in type II SN; MSU-ND-Mainz collaboration
- □ ¹¹²Cd(α,γ) measurement at NSL/ND p-process in type II SN; ND-ATOMKI collaboration
- Type I XRB multi-zone nucleosynthesis simulation UC-Santa Cruz-MSU-ND collaboration
- e-capture and pycnonuclear reaction ratesNSCL/MSU ND collaboration



2004 Emerging JINA MRC1 collaborations

- □ charge exchange and weak strengths for supernovae Osaka, Japan, KVI, Netherlands; & MSU
 - □ r-process reaction & observational studies
 Mainz, Germany; Chicago & MSU & ND & SEGUE
- p-Process SimulationsATOMKI, Hungary; Kocaeli, Turkey, FZ Karlsruhe, Germany; MSU & ND
 - ☐ Carbon production in AGB stars LANL & MSU
- ☐ SN Collapse simulation Arizona, UCSC, LANL; & ND

- ☐ Chemical evolution
 Minnesota & ND
 - ☐ Triple alpha rate
 Western Michigan & MSU
- □ s-process nucleosynthesis and AGB stars FZ Karlsruhe, Germany; LANL; Cambridge, UK; Torino, Italy; & ND



2004 Emerging JINA MRC2 collaborations

☐ XRB simulations UCSB; UCSC; MSU & ND □ rp-Process Reaction Studies Osaka, Japan; KVI, Netherlands; ND & MSU Electron Capture in NS Crust Aarhus, Danmark, Barcelona, Spain; & MSU Pycnonuclear Reaction Models Sao Paulo, Brazil; ININ Mexico; TRIUMF, Canada; & ND ■ Neutron Star Crust Cooling San Diego; IA Potsdam, Germany; & ND ■ Nova Burning Barcelona, Spain; UNC; Chicago & ND



JINA conferences & workshops

The r-Process – New Opportunities

Oct. 6-8, 2002; Gull Lake, Michigan

(Organizers: JINA-NSCL-MSU)

The Nuclear Physics Of Core Collapse Supernovae

May 26 - June 8, 2003; Institute of Physics, Aspen, Colorado (organizers: JINA - SciDAC U.Arizona)

Underground Accelerator for Nuclear Astrophysics

Oct. 27-28, 2003; Marriott University Park Hotel, Tucson, AZ

(Organizers: JINA – INT – LBNL)



The Nuclear Physics Of Core Collapse Supernovae

May 26 - June 8, 2003; Institute of Physics, Aspen, Colorado



New Experience;
Black Board Teaching



2004 workshops

First Argonne/MSU/INT RIA Workshop

January 8-10, 2004; INT, Seattle, Washington

(organizers: INT-ANL-MSU-JINA)

Nuclear Physics and Astrophysics of Accreting Neutron Stars

April 23-24, 2004; ITP, Santa Barbara, California

(organizers: JINA-ITP)

Advances and Challenges in Nuclear Astrophysics

May 24-28, 2004; ECT Trento, Italy

(organizers: JINA-LLN-ECT)

The 7th Torino Workshop on Nucleosynthesis in AGB Stars

August 2-6, 2004; Cambridge, UK

(organizers: JINA-Torino, Cambridge)

Chemical Enrichment of the Early Universe

August 9-13, 2004; Santa Fe, New Mexico

(organizers: LANL-JINA)



Topic oriented training

Intensive 1-2 week training on special subjects with lectures, exercises, homework & and tests:

Workshop on Charge-exchange Reactions

May 31 - June 4, 2004, NSCL East Lansing, Michigan (organizers: NSCL-JINA)

Workshop on R-Matrix Theory and Applications

October 2004, Notre Dame, Indiana

(organizers: NSL-JINA)

Web-based course development:

http://www.jinaweb.org/html/seminars.html



Plans and Questions

- Strengthen the links within collaborations by postdoc & student exchange
- Strengthen the role of working group & collaboration meetings?
- Cut back on involvement in large conferences?
- Further steps towards special schools and training courses?