



NJOY Status

A.C. (Skip) Kahler & R.E. MacFarlane

T-2, Nuclear & Particle Physics, Astrophysics and Cosmology Group

Theoretical Division

Los Alamos National Laboratory

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Abstract: We provide a summary review of recent changes to the T-2 Group web site with particular emphasis on the “Nuclear Information Service” and the NJOY Nuclear Data Processing Code System.

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<http://t2.lanl.gov>

The <http://t2.lanl.gov> web address now serves as the top level for LANL's T-2 (Nuclear & Particle Physics, Astrophysics and Cosmology) Group.

The “Nuclear Information Service”, which was the previous top level, is now one of several links found to the left on this new top level page.

The “Nuclear Information Service” url is <http://t2.lanl.gov/nis>.

T-2, Nuclear and Particle Physics, Astrophysics and Cosmology

T Division

FOCUS AREA S

- Nuclear Information Service
- Nuclear Physics
- Particle Physics
- Astrophysics
- Cosmology

CONTACTS

Group Leader
Joe Carlson

Deputy Group Leader
Gerry Hale

Administration
Kay Grady
505-867-4835

Office Location
MS B283
TA-3, Bldg 123, Rm 183A
and Room 149

T-2 Home

Radius of the Visible Universe

Age of the Universe

0 10⁻⁴² Sec. 1 Second 300,000 Years 1 Billion Years 12-15 Billion Years

Big Bang Inflation Quark Soup Big Freeze Out Parting Company First Galaxies Modern Universe

We provide scientific and technical leadership in fundamental and applied theoretical research in [applied and fundamental nuclear physics](#), [particle physics](#), [astrophysics](#), and [cosmology](#). Members of the *Nuclear, Particle, Astrophysics and Cosmology Group (T-2)* of the *Theoretical Division* frequently contribute and collaborate beyond these core disciplines as opportunities arise.

The group maintains theory, modeling and simulation capabilities in a broad set of areas. Current activities of our group's members include research in nuclear reactions and structure for applied and basic science, nuclear many-body theory, nuclear reaction theory, fission, nuclear data evaluation, processing and validation testing for applications that include stockpile stewardship, threat reduction, and energy security, heavy ion physics, nuclear astrophysics, physics beyond the standard model, neutrino physics, lattice quantum chromodynamics, nonequilibrium field theory, astroparticle physics, high energy astrophysics, proto-planet formation and migration, astrophysical data analysis and processing, plasma astrophysics, cosmology and galaxy formation, gravitation and gravitational waves, precision cosmology, and dark matter and dark energy, to name a few.

T-2 Resources

- Seminars
- Group Roster
- Group Roster (pdf)
- Jobs
- DOE Office of Science Programs
 - Nuclear Physics
 - High Energy Physics
 - Fusion Energy Sciences
- NNDC
- RSICC
- NEA
- US Nuclear Data Program

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<http://t2.lanl.gov/nis>

All “Nuclear Information Service” features, including links to Data, Codes, Publications and Training, that were previously available remain.

Any bookmark that contained “t2.lanl.gov” should be changed to read “t2.lanl.gov/nis”.

File Edit View History Bookmarks Tools Help

LANL Inside x NIS/main x +

t2.lanl.gov/nis/

Los Alamos NATIONAL LABORATORY EST. 1945

Home Phone Library Subscribe Low-bandwidth Twitter Facebook YouTube LinkedIn

Search

T-2 Nuclear Information Service

T-2 Home » T-2 Nuclear Information Service

T-2 Home

NIS Home

RESOURCES

Tour area

Data area

Codes area

Publications area

Training area

CONTACTS

Bob
ryxm@lanl.gov

Skip
akahler@lanl.gov

Peter
moller@lanl.gov

Mark
mparis@lanl.gov

Welcome to the T-2 Nuclear Information Service.

This service is run by Group T-2, Nuclear and Particle Physics, Astrophysics, and Cosmology of the Los Alamos National Laboratory, which is operated by Los Alamos National Security LLC (LANS) for the Department of Energy.

This site concentrates on nuclear modeling, nuclear data, cross sections, nuclear masses, ENDF, NJOY data processing, nuclear astrophysics, radioactivity, radiation shielding, data for medical radiotherapy, data for high-energy accelerator applications, data and codes for fission and fusion systems, and more.

Use the links to the left to access the various features of our site.

The **Tour area** contains educational material on the field of nuclear data and information on how to use our site effectively.

The **Data area** contains various sets of nuclear data that can be browsed, downloaded, or viewed graphically. It also includes the online Nuclear Data Viewer.

The **Codes area** contains information on computer codes for nuclear data that we have developed in the course of our work.

The **Publications area** contains publications about nuclear data and techniques for working with nuclear data.

The **Training area** contains online training courses for the ENDF evaluated nuclear data files and the NJOY nuclear data processing system.

Related Sites

National Nuclear Data Center (NNDC)

Radiation Safety Information Computational Center (RSICC)

Nuclear Energy Agency (NEA) Data Bank

IAEA Nuclear Data Centre

JAEA Nuclear Data Center

Red Cullen's Web Site

News

10 Jan 2013 -- NJOY 99.393 released. Check the Codes Area.

3 Feb 2012 -- The formal papers on ENDF/B-VII.1 from *Nuclear Data Sheets* are now available in the publications area for scholarly use.

12 Jan 2012 -- ENDF/B-VII.1 neutron and decay data are now available from our site. Go to the ENDF/B link in the Data area.

22 Feb 2011 -- NJOY 99.364 released. It has changes to support JENDL-4 and ENDF/B-VII.1, and it includes modifications for consistency with NJOY10.

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<http://t2.lanl.gov/nis/codes.shtml>

This url provides links to both NJOY99 and NJOY2012.

Future development of NJOY99 will be very limited.

NJOY2012 distribution is coordinated through LANL's Technology Transfer Division.

Contact information may be found at <http://t2.lanl.gov/nis/transfer.html>

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Ms. Mariann R. Johnston
Software Licensing
Technology Transfer Division
Los Alamos National Laboratory
Office: 505-667-4391
Email: mjohnston@lanl.gov

The screenshot shows a web browser window displaying the T-2 Nuclear Information Service website. The browser's address bar shows the URL <http://t2.lanl.gov/nis/codes.shtml>. The website features a header with the Los Alamos National Laboratory logo and navigation links (Home, Phone, Library, Subscribe, Low-bandwidth). A search bar is also present. The main content area is titled "T-2 Nuclear Information Service" and includes a sidebar with links to "T-2 Home", "NIS Home", "RESOURCES", "Tour area", "Data area", "Codes area", "Publications area", and "Training area". The main content area is divided into sections: "Codes Area" (describing information on various computer codes), "NJOY99" (describing the standard Fortran-77 release of the NJOY Nuclear Data Processing System), "NJOY 2012" (describing the new version of the NJOY Nuclear Data Processing System), and "TRANSX 2" (describing a code for preparing data tables for nuclear transport codes). A "News" section on the right provides updates on the latest versions of NJOY99 and NJOY2012. The footer contains contact information and a copyright notice.



<http://t2.lanl.gov/nis/codes/NJOY12/index.html>

The basic page layout is virtually identical to that used for NJOY99

One change is that the manual is available as a downloadable pdf file.

Basic installation instructions are contained in the “Readme0” link; cursory information on the various updates is available in the “Readme#” link.

Test suite input and output files are available.

NJOY 2012
Nuclear Data Processing System

The NJOY 2012 User Manual LA-UR-12-27079 Rev (pdf):
[Report](#)

Basic Instructions:
[Readme0](#)

Current Description:
[Readme8](#)

Latest Updates:
[up8](#)

User Input Instructions:
[Userinp](#)

Interface File Formats:
[Ifiles](#)

Test Problem Input and Output Files:

These test results are from a Mac workstation running the Intel ifort compiler with -fast (see [makeif.int](#)). NJOY2012 can also be run using the free g95 compiler on Mac or linux (see [makeif.g95](#)) or the GFortran compiler included on most linux distributions (see [makeif.gfn](#)). Windows users can run the test problems using the free g95 compiler (see [makeif.win.g95](#)) or the Intel ifort compiler (see [makeif.win.ifort](#)). Convenient scripts for installing NJOY12 on Windows machines are available here as [makeNJOY.win1.bat](#) and [makeNJOY.win2.bat](#).

Problem	Input	Outputs	DOS Input
1	in01	out01 , pend01	run01.bat , in01.dat
2	in02	out02 , pend02	run02.bat , in02.dat
3	in03	out03 , pend03	run03.bat , in03.dat



NJOY2012

- NJOY2012.0 was released in December, 2012
- NJOY2012.8 was released in August, 2013.
 - Additional patches are being prepared for release in December, 2013.

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