

NJOY21: Next Generation Nuclear Data Processing Capabilities

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History of NJOY

- Planned as successor to MINX
 - **M**ultigroup **I**nterpretation of **N**uclear **X**-Sections
- First public release in 1977
 - RSIC—Radiation Shielding Information Center
 - NESC—National Energy Software Center
 - Custom line editor—upd—for version control
- 10 major releases since 1977
- NJOY2012—December 2012
 - Available only through LANL

NJOY21: NJOY for the 21st Century

- *Major* update to NJOY2012—ground-up rewrite of NJOY2012
 - Modern software development practices
 - Modern version control and build system
 - Modern and continuous verification and validation
 - Modern code design
- Ability to utilize modern nuclear data formats (ENDF and GND)
- Modern interaction with NJOY
- Easier, faster, more flexible, maintainable
- Improved diagnostics (error messages)
- **Maintain capabilities of and backwards compatibility with NJOY2012**

Opening NJOY21

Open Source Availability

<http://njoy.lanl.gov>

- Remove export control restrictions
- Increase availability of NJOY
- Encourage usage of NJOY
 - Graduate students
 - Researchers
 - Data users
- Encourage collaboration in data processing tools
- Improve data processing tools