PENTRAN Code System

\$19,900 (1 year license, 5 users, unlimited platforms).

<u>Introductory Package/Trial User Pricing Options are Available*</u>

Includes full neutronics 3-D Sn analysis tools:

- **PENTRAN**¹ 3-D Parallel Sn and CRT with MPI support, **forward and adjoint**, fixed source or eigenvalue, with angular, energy, spatial (coarse mesh zone) MPI parallelism with Sn adaptive schemes, or ray trace in 3-D
- WWPEN2MC for preparation of CADIS Adjoint
 Transport Weight Windows for MCNP³ WWINP Files,
 with MIRROR-ADJ and 3DIWWG interpolation utilities
- PENDATA parallel data gathering tool
- **PENMSHXP** block adaptive 3-D mesh generator with material balance, and geometry + solution plotting capability
- GMIX & HMIX MG cross section mixing, homogenization, nuclear parameters, and processing tools
- OJOYU multigroup cross section prep for NJOY²
- **XSMCNP** for multigroup MCNP³ cross section generation
- REPRO preconditioning tool to accelerate PENTRAN
- PPEN.pre / PPEN.post, parallel execution scripts
- Sort-lodbal-flx data sorting script when automatic load balancing is used in PENTRAN
- Linux OS required. On-line or in person training and consulting available
- Upgrades for any codes during license period (non-trial period/contracted only).
- Extended consulting, problem resolution, and cross section generation and data services available



http://gesjodencorp.com

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¹PENTRAN is from http://gesjodencorp.com. Available to most countries, but falls under ECCN 0D999(b), US Dept of Commerce classification, 21 Mar 2011. Country citizenship verification is required for all users; export is limited to specific countries and persons—licensees must administer controlled access.

²A parallelized NJOY cross section production option is available using NJMAKE and ETEN (MPI) codes to expedite NJOY parallel processing for fast multi-group cross section production. This set of routines can be purchased separately as a **Cross Section Generation Toolkit**.

³MCNP must be obtained by the user via RSICC license at ORNL. MCNP and MCNP6 is a trademark and product of Triad National Security, LLC, Los Alamos National Laboratory, 2018

