Workshop 3: PENTRAN 3-D Parallel Sn (PSU)

Friday May 12, 2000 Workshop Registration: 7:30 AM - 8:00 AM Workshop: 8:00 AM - 12:00 Noon

by Prof. Ali Haghighat and colleagues at Penn State University (PSU)

This workshop concerns recent advances, new features and capabilities of the Penn State PENTRAN multidimentional discrete ordinates program.

PROGRAM

PENTRAN - 3D Parallel Sn Code System INTRODUCTION

- Boltzmann equation
- Discrete Ordinates method

Sn MAJOR ISSUES

- Numerics (quadratures, differencing, ...)
- Mesh generation
- Cross section preparation
- Input preparation
- Sn codes

INTRODUCTION TO PENTRAN CODE

- Introduction and features
- Verification and validation
- Parallel performance on different platforms
- A sample PENTRAN input file

PENTRAN CODE SYSTEM

- PENMSH: 3-D mesh generator
- PENINP: Automated input preparation
- PENTRAN: 3-D parallel Sn code
- PENDATA/PENPRL: Post-processing

PENTRAN COMPUTER EXERCISES

- Demonstration
- Hands-on exercises

Workshop Homepage: http://www.hsact.com/physor02.htm

Questions regarding the workshop should be directed to Prof. Ali. Haghighat (haghighat@psu.edu).