



# **From Student Intern to Staff and Everything in Between**

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**Member of Technical Staff**  
**SEERI Summer Seminar**  
**06/30/2010**





# Who AM I?

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- **B.S. Nuclear Engineering**
- **M.S. Nuclear Engineering**
  - Thesis work at Sandia – Development of Sensitivity Analysis with the Use of TSUNAMI-3D Sensitivity Coefficients for Benchmark Uncertainty Analysis.
- **Student Intern for 2.5 years**
- **Full Time Staff**
  - One whole month so far
  - Where the real fun begins

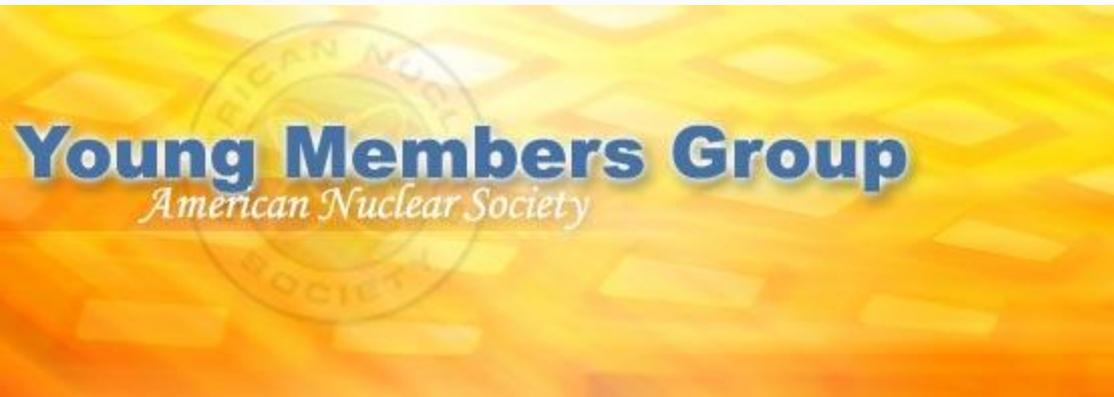


# Society Involvement



## ■ Will Never Learn to Say No...

- American Nuclear Society
  - ◆ Nuclear Criticality Safety Division – Secretary
  - ◆ Young Members Group
  - ◆ Student Sections Committee
  - ◆ Professional Women of ANS
- ANGLE (NAYGN) – Vice Chair/Chair-Elect
  - ◆ Started as a student
  - ◆ Many Outreach Events







# ANGLE Plug

- **North American Young Generation in Nuclear**
  - Young Professionals Group
    - ◆ Professional Development and Knowledge Transfer
    - ◆ Outreach and Volunteering
  
- **Upcoming Event:**
  - Lunch at Hardin Field – July 15<sup>th</sup> 11:45-1:30
    - ◆ Food, Games and Networking
    - ◆ Anyone is Welcome



# Work

## ■ Student Internship

- SCALE/KENO and MCNP Modeling

- ◆ Learned by Example

Critical Experiments

- ◆ Awesome! (Not many people are doing these)

## ■ Staff

- Whole month so far...

- ◆ TA-V Transformation
- ◆ ACRR/GIF Operations
- ◆ Critical Experiments

**KENO**

**TRITON**



*Java Plots Especially Nice Output*



*Tools for Sensitivity and Uncertainty Analysis Methodology Implementation*

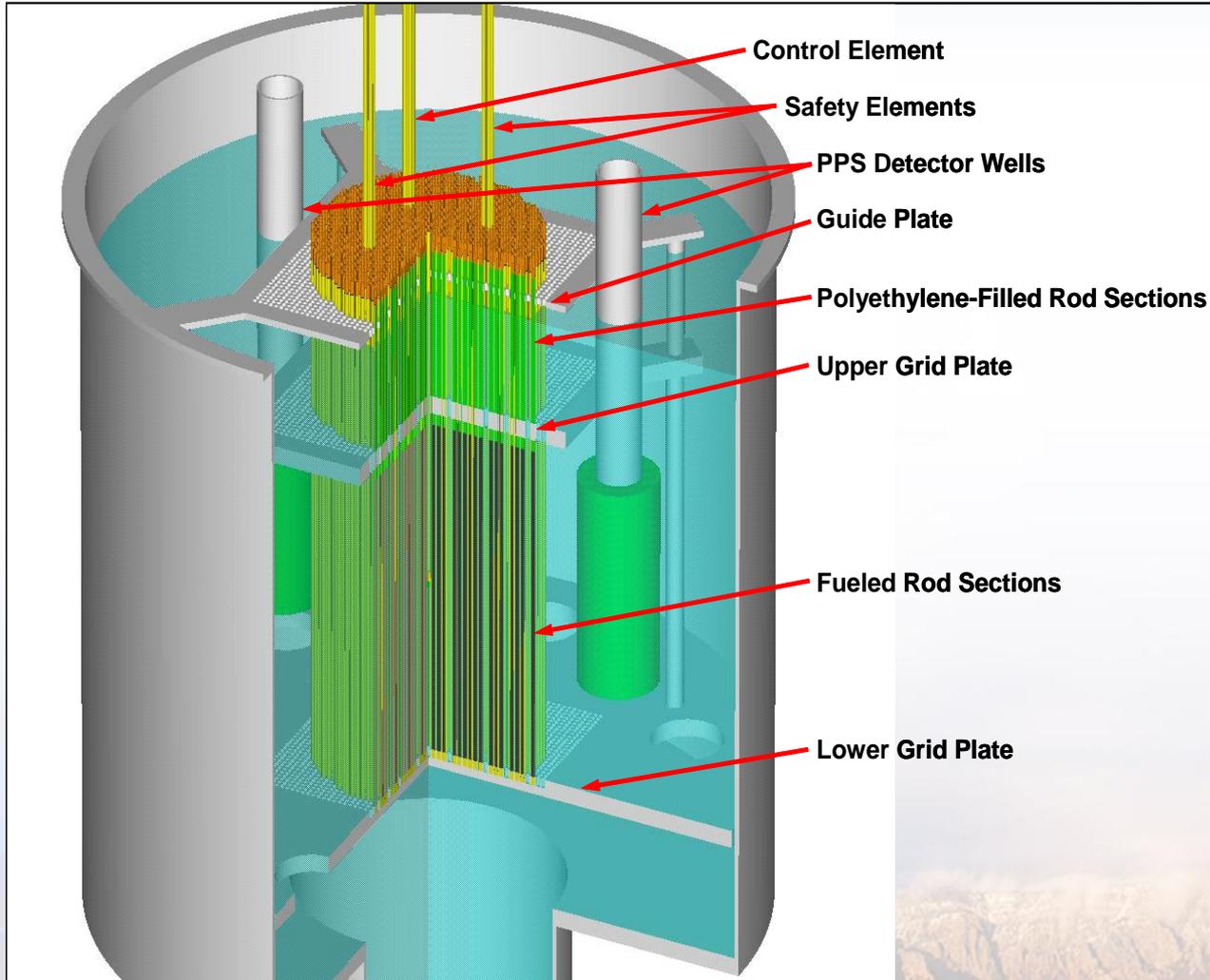
**SCALE**

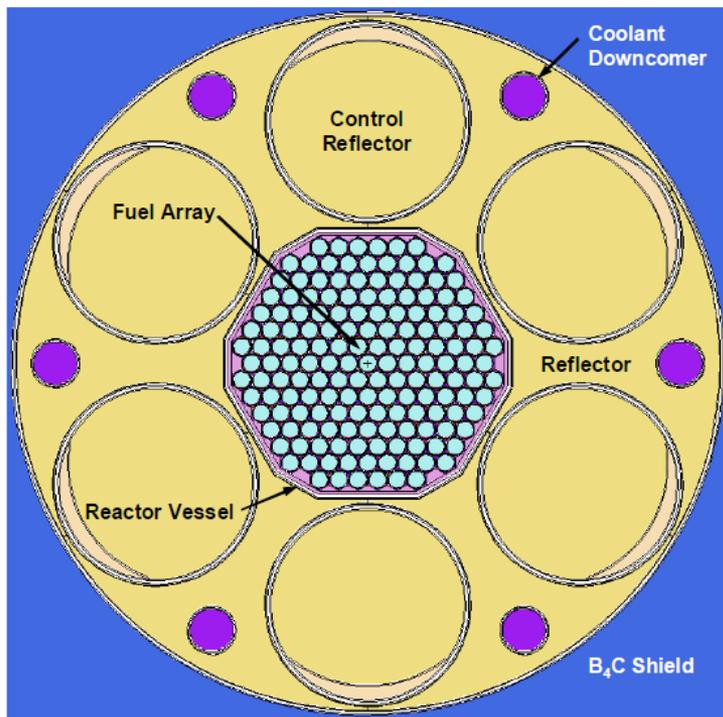
**Standardized Computer Analyses for Licensing Evaluation**



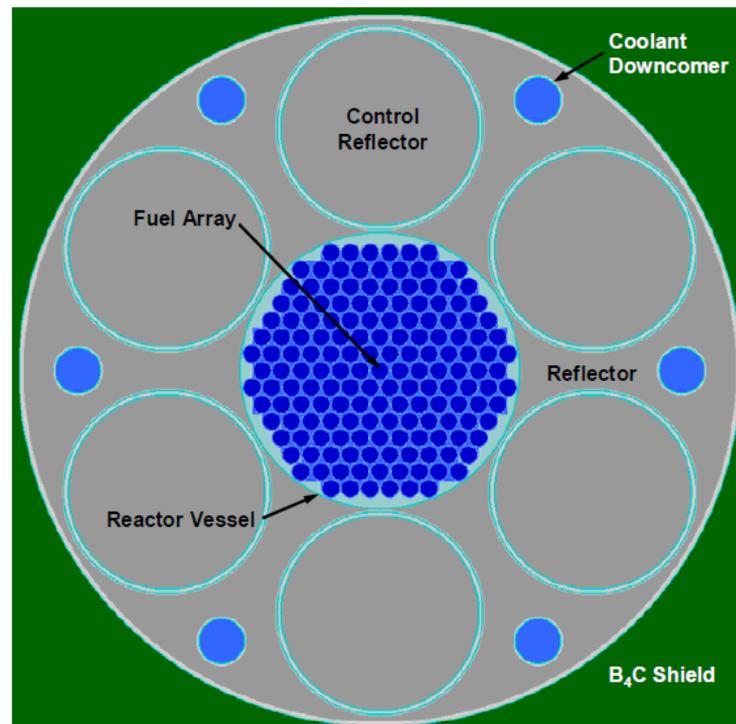
Sandia National Laboratories

# Modeling



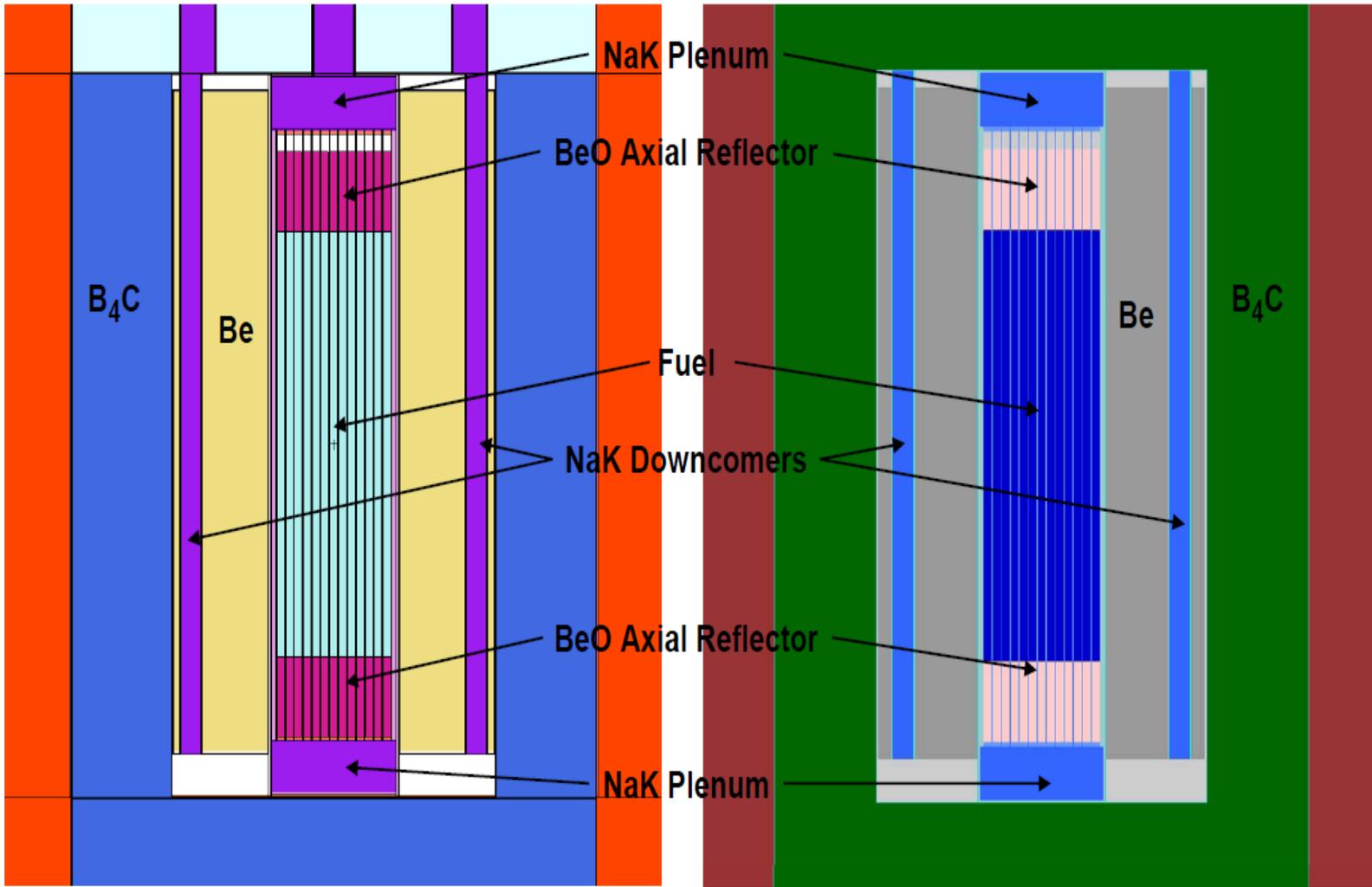


LANL MCNP Model



KENOV.a Model



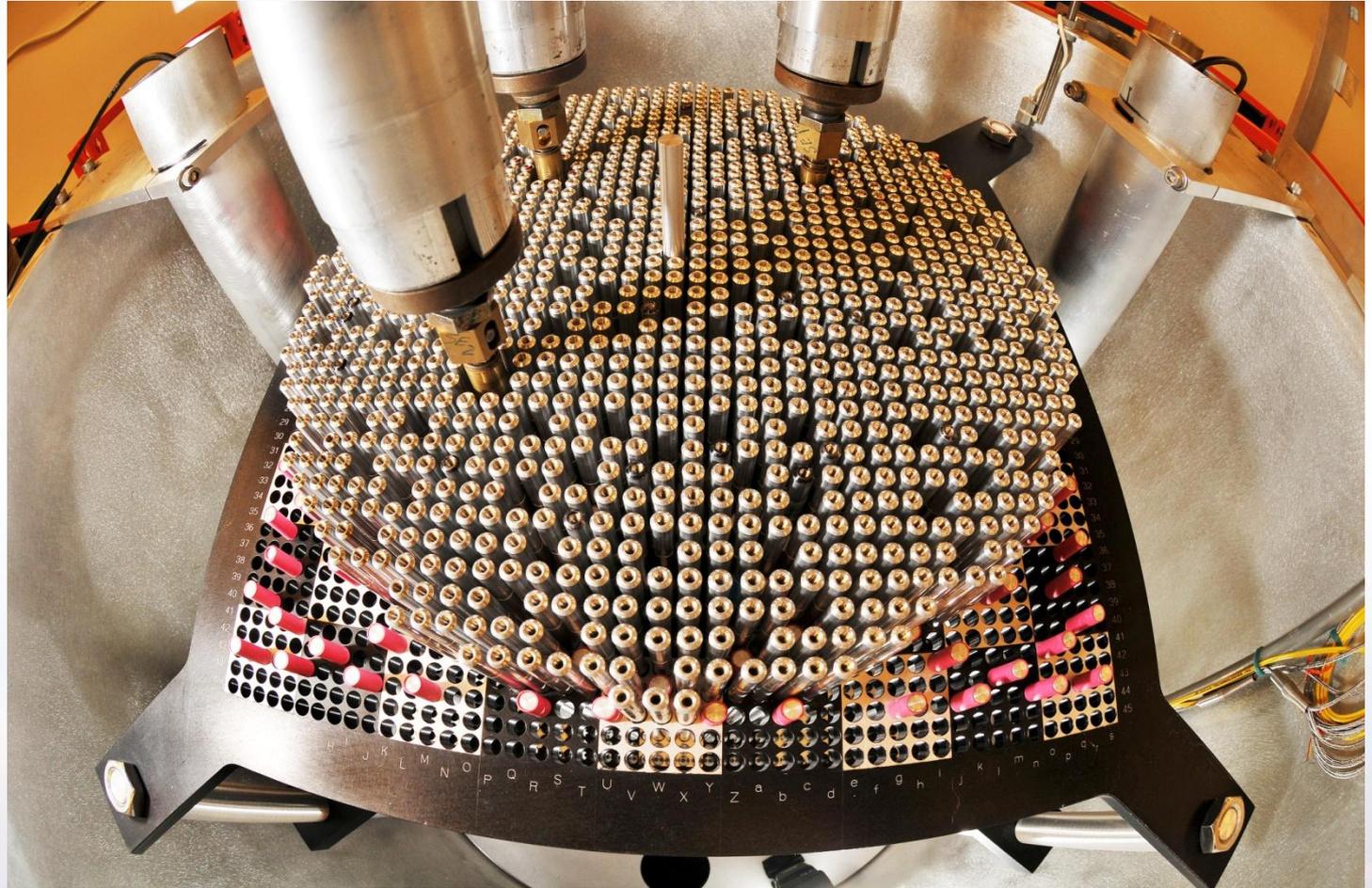


LANL MCNP Model

KENO.V.a Model

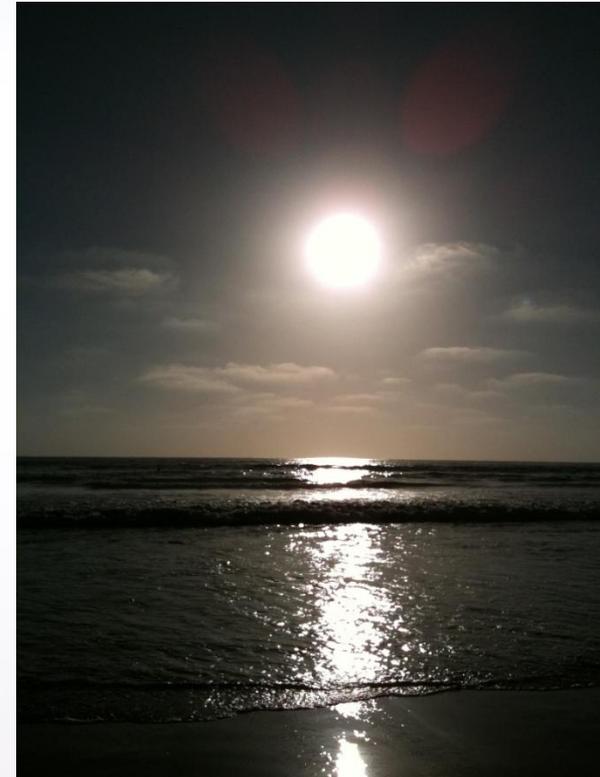


# Critical Experiments



# What SEERI did for me?

- **Half of my funding for work**
- **Travel**
  - Attended National ANS Conference
  - Attended Nuclear Criticality Safety Division Topical Meeting



# Thank You, and Any Questions?

