



PSAAP Mentorship Program Experience  
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# PSAAP II Mentorship Experience with Ben Schroeder (Utah, Advisor: Smith) Sandia Mentor: Rich Hills

## Project Objective:

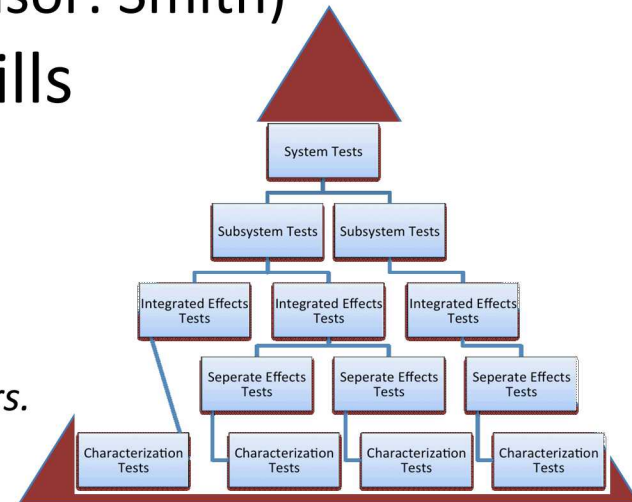
- Relate model validation results at the subsystem level to computational model simulations at the system level. *Research area in ASC V&V portfolio for > 5 years.*

## Technical Benefits for SNL

- Fresh look at recent ideas in Bayesian calibration to characterize model form error and roll up the results to the application.
- Method allows physics constraints to be incorporated.
- Ben demonstrated this approach by applying the scheme to pedagogical problem related to his Dissertation.

## Other Benefits for SNL

- Exposed to a limited “inside look” at Sandia’s broad application space and technical challenges.
- Sandia can be a rewarding place to work.



# Challenges

- Limited area/clearances → longer time would be better
- Proper project alignment to PhD work is necessary to benefit both parties → this existed with Ben's work
- Need a seasoned PhD student to be effective over a 10 week period