

Round Table Discussion

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Topics

- Model Reduction
- Analysis of cryogenic systems
- Connection to CAD/FEA models
- Generic post-processing

Model Reduction

- What is the purpose of model reduction?
 - Acceptable computation time?
 - Manageable post-processing / interpretation?
 - Manageable integration subco models in system model?
- Model reduction versus reduced/consolidated view of model and results, and keep running the complete model
- How is reduced model verification handled?

Analysis of cryogenic systems

- User experience?
- Particular requirements for modelling
- Numerical accuracy
- Handling non-linearities
- Adequate representation of materials/properties
- ESARAD/THERMICA, ESATAN OK? Special pre-cautions?

Connection to CAD/FEA models

- Are users importing CAD/FEA models routinely?
 - What standards? Or proprietary interfaces?
- How is idealisation done?
 - By hand / automatic? In CAD tool? In thermal modelling tool?
- Typical model size?
 - Hundreds of surfaces? ~1000? ~5000? ~10000? ~50000? ~100000?
- Closing the loop: export back to CAD/FEA necessary?

Generic post-processing

- Asked many times...
- Is it possible to agree on common functionality?
- Can current proprietary packages be merged into one public one
- Build around common open standard results data format
 - STEP-NRF / HDF5 results format is planned to become available in 2002
 - Then output routines for ESATAN, ESARAD, ...