

# Discussion

- Finances, funding, commercialization; how to go about this?
- How to create an IAB?
  - Which is the Institute to maintain the content?
  - Which bodies should be involved? If any ...
- Can the liability issue be solved?
- Procedures
  - How to submit a model?
  - How to request a standardized representation?
  - How to make accessible?
- Technology/Methodology
  - How to formalize purpose of models? How to capture the context for which the model was designed?
  - All we may need is a good standard model of an abstract component (see induction motor success)
- Tone down our expectations ...

# Discussion

- Problems in standardization
  - Dozens (moderately estimated) of induction motors; not even two models of the same motor give the same results
  - Need standardized execution component as well as same model

# Discussion

- Success stories
  - Navy: Can you capture how each part of a system is implemented; how parts are produced and composed, etc. No need to build anymore, just pick up the software
  - Virtual Laboratories
  - Computer aided manufacturing
  - Virtual Testbed
  - OLMECO
    - Mechatronics library
  - Cosimulation project (Peter Breedveld & Mechanical Engineering)
  - One single induction motor became a referencing benchmark
  - Richard Fikes' work at Stanford; capturing assumptions
  - Manitoba mafia
- Need
  - How even to capture the specification? Include solver, ... include assumptions, ... include intent, ... application domain, operational range,