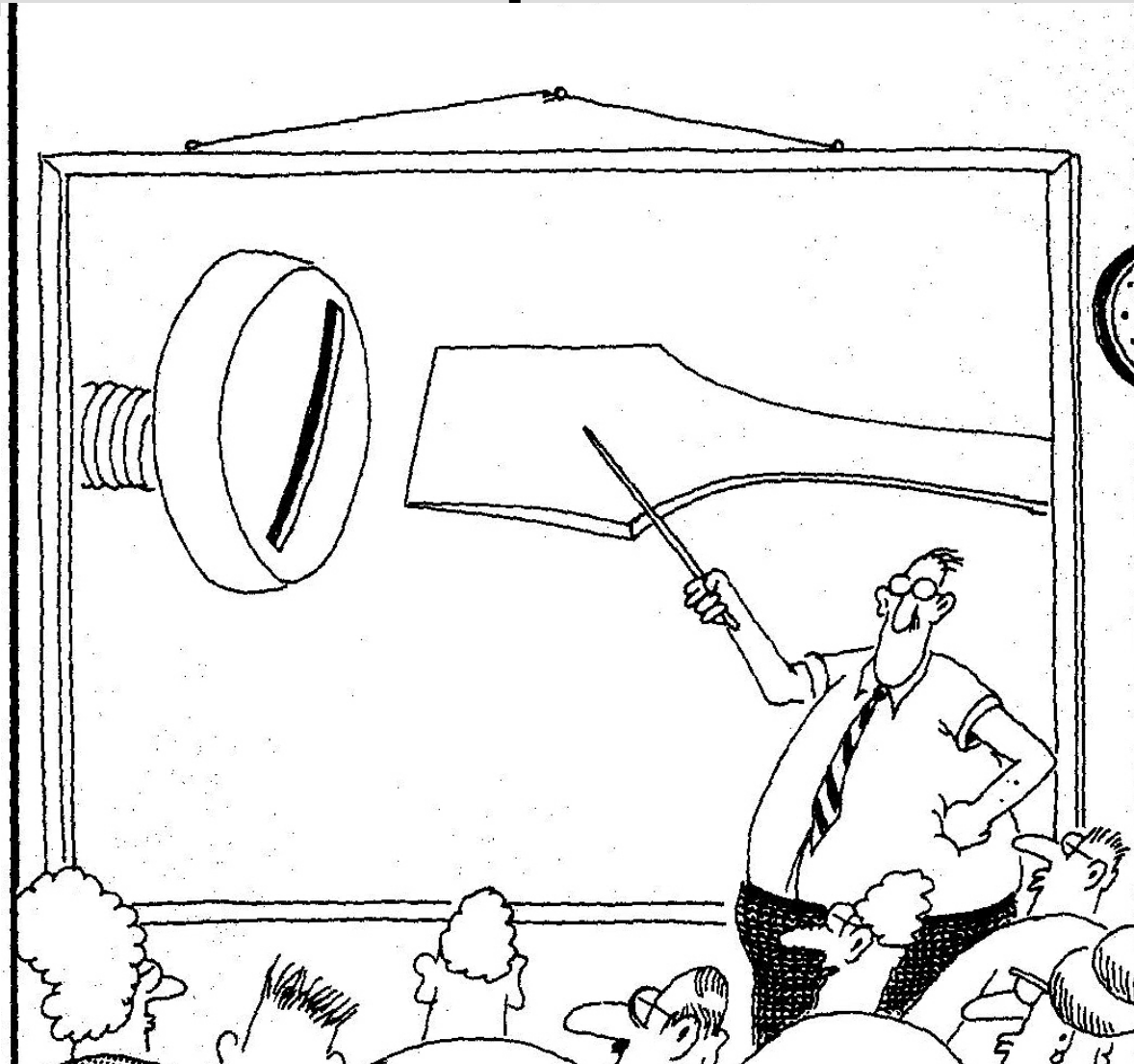


GAMS



True Hardware Independence



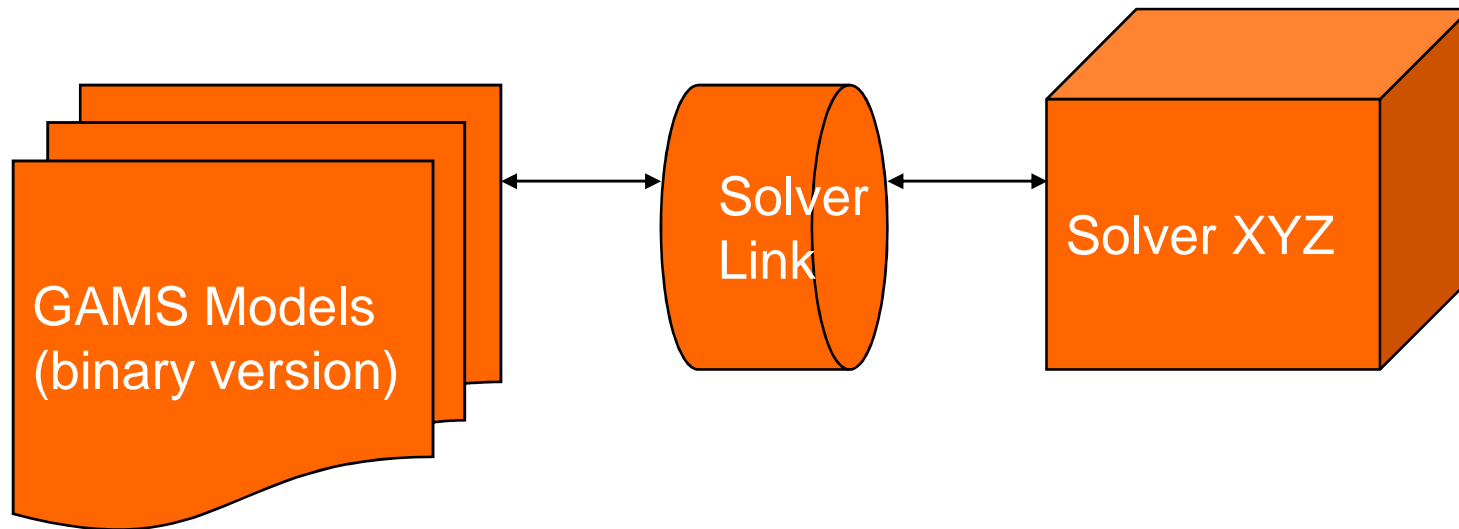


Solver Independence: What Is It?

- Separation of models and their solution methods
- Depends on both models and solution methods
- Model requirements
 - Use “typical” forms (e.g. hard vs. soft constraints)
 - Avoid “non-standard” parts (e.g. semicont vars)
- Solver requirements
 - Accept “typical” forms
 - Don’t implement “non-standard” parts
- Hardware/OS independence: running everywhere
- Data Independence



A GAMS link: perfect solver independence





Soapbox Slide

- What works
 - COIN/OSI
 - Inheritance & callbacks
 - Extensive testing
- What doesn't work – adding it in at the end
- Pleasures
 - A perfect fit
 - IPOPT inheritance
- Annoyances
 - Untested solver independence