What will be the next breakthrough solutions in Formal?

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Customers' Most Pressing Problems

- Understand & manage design complexity
- Reduce verification and validation cost/TTM
- Early spec & verification at Arch/uArch level
- System level FV solution: "Game Changing"
- Progress metrics, coverage and predictability



FV Research Agenda

- High Level Modeling language, ver., and refine
- "Source Level" formal techniques:
 - Automatic Abstraction, SMT based reasoning, word level MC and symbolic simulation, ...
- Design for verification
- Interactive verification and search
- Formal coverage
- Post-Si FV



What customers find uninspiring in FV Research?

- Any research that has no direct link to their problems
- Methods which are hard to use/integrate in their flows
- Small tweaks of FV algorithms with marginal impact



Thanks

