STATE OF THE ART OF COMPUTER/MATHEMATICAL SIMULATION TOOLS

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The presentation will be partitioned into essentially three topics.

- 1) Discretization of simulation domains, i.e. device geometries
- 2) Solution strategies for systems of nonlinear equations.
- 3) Algorithms for the solution of large, sparse linear systems.

Particular emphasis will be laid on bottlenecks with the mentioned topics in order to stimulate further research.