1. Description of the computation problem of interest
The supporting arguments for studying the problem may include
- a key component in modeling
- a computation bottleneck in numerical solution
- an investigation of alternative and promising approaches
- a better interpretation or understanding of an important problem
- a study of new computer architectures (hardware or software)

2. Description of the approaches taken
The supporting arguments for the chosen approach may include
- the physical aspect
- the efficient computation aspect
- the architectural aspect
- the numerical aspect (such as to reduce or eliminate numerical artifact)

3. Post-analysis may include
- advantages and disadvantages
- observed compared to predicted
- development cycle, performance metrics
- comparison to existing approaches

4. Programming environment (optional)