

Detector Software

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BaBar Software Legacy

- Most BaBar software written by physicists
 - deep understanding of detectors + physics
 - software engineering not always perfect
- BaBar was cutting edge for C++
 - compiler restrictions (no expression templates, ...)
 - limited library support (stl, boost, ...)
- Resulting code base is useful but flawed
 - maintenance and performance issues

SuperB Software Planning

- Must extract maximum benefit from BaBar legacy
- Must modernize and improve our code base
 - emphasis on performance, reliability and standards
- Must accommodate technical developments
 - multicore
 - adaptive algorithms
- Must make optimum use of resources
 - physicist programmers
 - professional software engineers

Role of Detector Physicists

- What level of participation do you foresee with SuperB software development?
 - coder?
 - consultant?
- Can detector groups dedicate members for software?
 - obtain necessary training to participate effectively
- What organization structure is optimal?
 - detector subsystem?
 - Reco/Sim/algorithm/???