



nano BPM collaboration- Plans

Develop BPM analysis, microwave design and signal processing electronics

Implement stabilization system tests → phase 1 goal

Fast feedback tests → phase 2 goal

August 2003



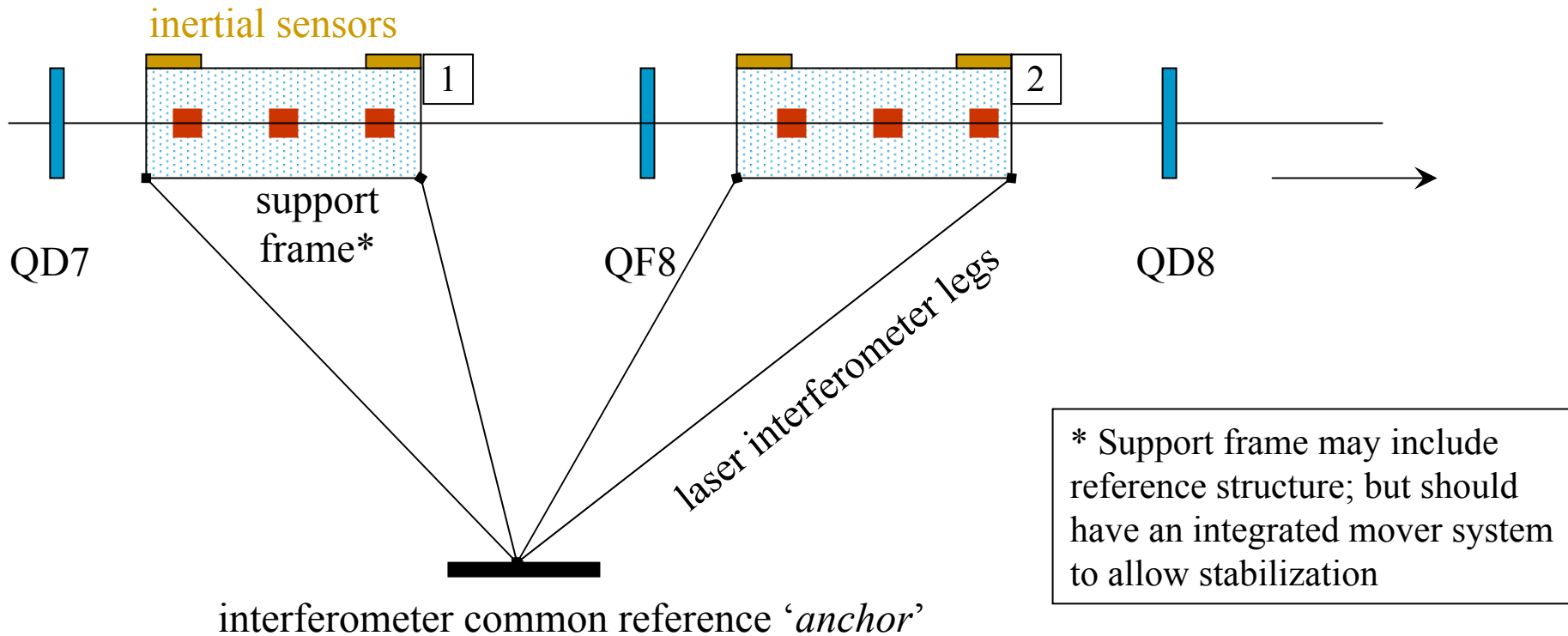
Extraction line layout - proposed

- 3 nanoBPM's between QD7 and QF8
 - existing
- need to add 3 more between QF8 and QD8
 - these need to be built
- Both sets need support frame *and* stabilization systems
- Both sets should have inertial *and* laser-interferometer stabilization

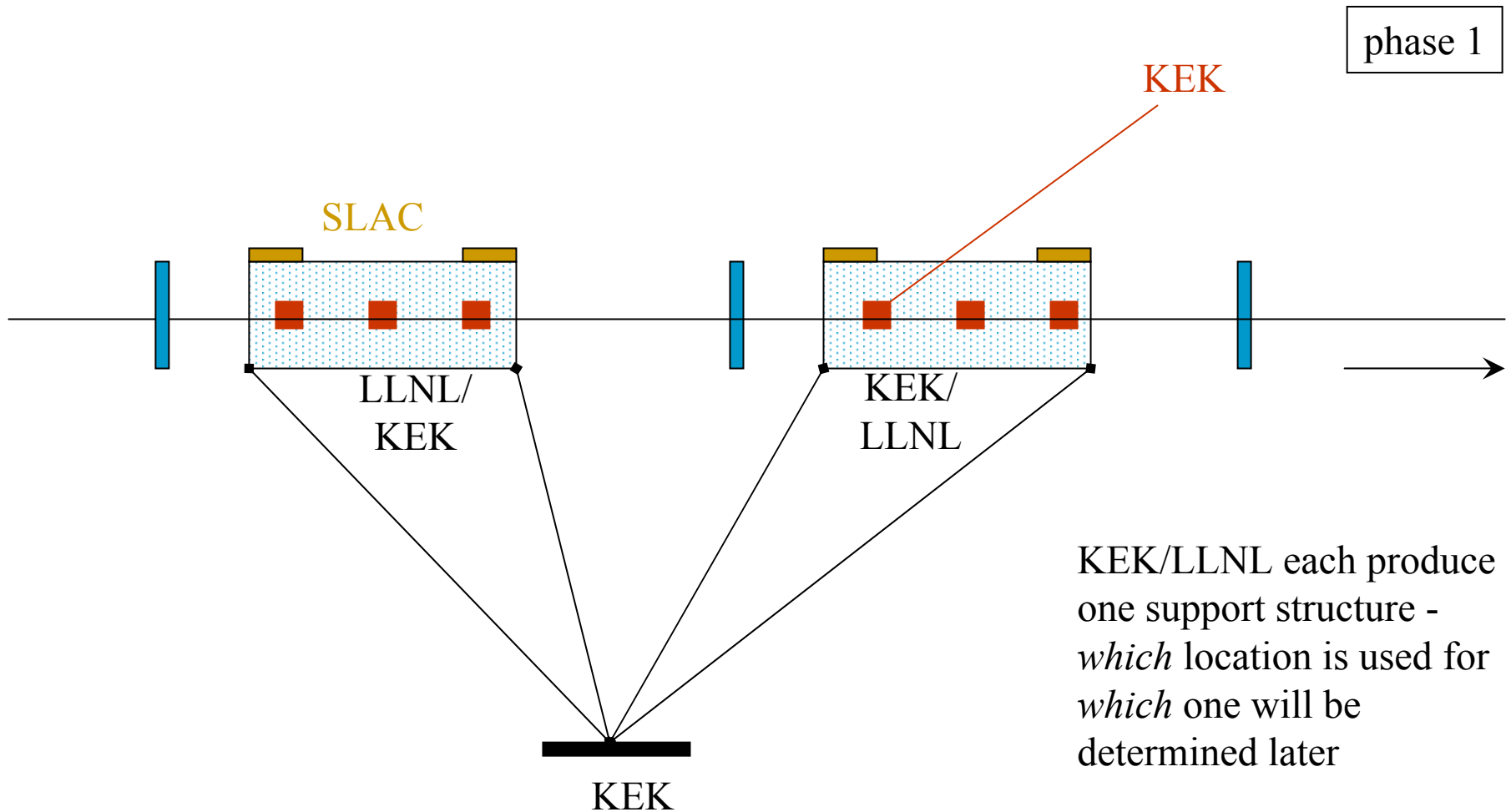
Proposed technical scheme:

phase 1

- Inertial stabilization will not work below 0.1 to 1 Hz.
- *a proposed goal is to interconnect the two technologies into one test facility*



Proposed collaboration:





Proposed collaboration list:

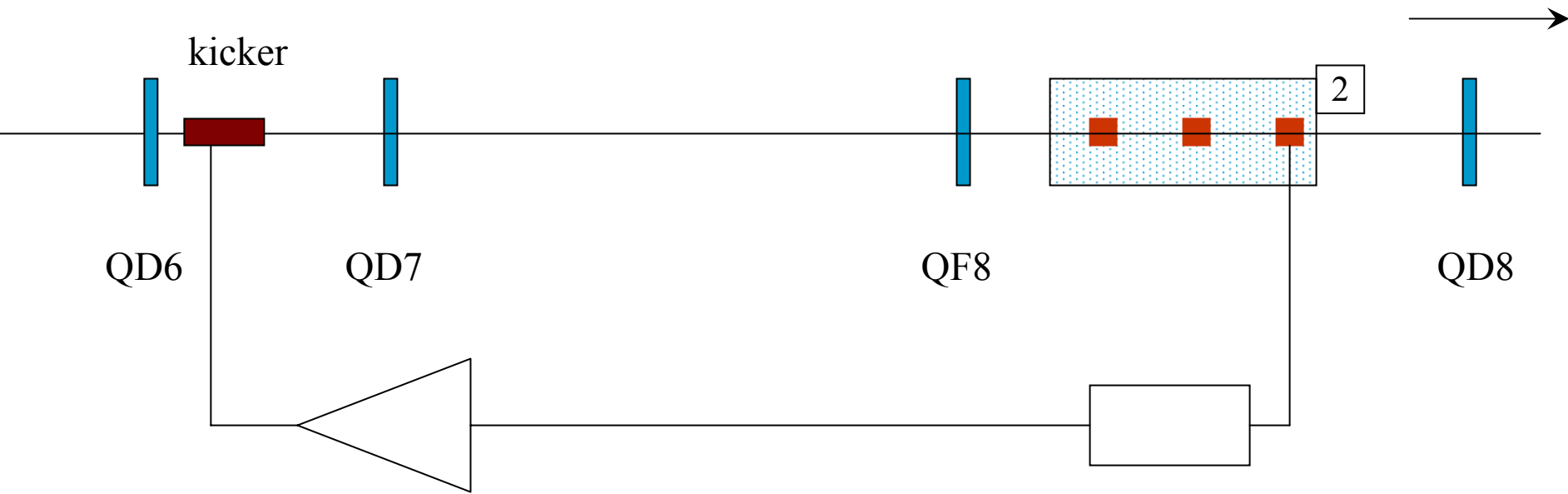
phase 1

1. NanoBPM electronics and software development SLAC/LBL/UK
2. Support frame #1 adapted for use with inertial sensors LLNL
3. Support frame #2 adapted for use with optical anchor KEK
4. Support frames with both inertial / optical stabilization *TBD (to be determined later)*
5. Sensors and movers for inertial stabilization (including stabilization software) SLAC
6. Cavity BPM's (minimum 3 new ones) – C band KEK
7. Basic girder infrastructure between QF8-QD8 KEK

ISG nanoBPM video – Collaboration meeting
Marc Ross/SLAC

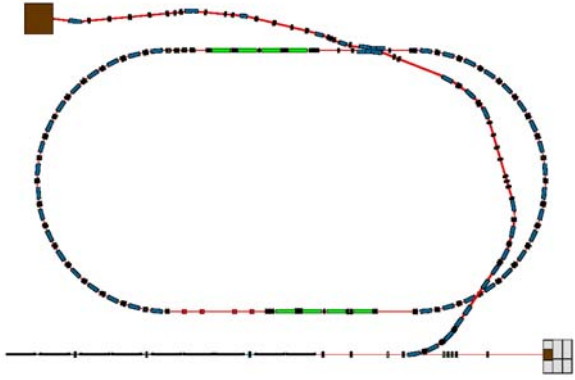
Fast Feedback - proposal

phase 2



Kicker, cavity BPM – (KEK)

Amplifier (UK), processor (KEK/SLAC/UK)



- 高エネルギー加速研究機構
- SLAC
- LLNL
- QMUL/Oxford
- UCB

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