



Cost Drivers for Magnets

(Session Summary)

VLHC Magnet Workshop

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Participants

Erich Willen

Peter Wanderer

Mike Anerella

Mike McAshan

Bill Fowler

Steve Gourlay

Bill Hassenzahl



RHIC Experience

Lab- Industry Partnership Worked Well

But

- Required diligence on the part of BNL
- Proximity to vendor was key
- Start tech x-fer early

Need to document



Cost Model

To Start

- Take Erich's scaling and modify for general application
- Bill Fowler's VLHC (Pipeatron) costs
- Mike McAshan's temperature scaling?
- Component breakdown common to all designs



Cost Model (cont'd)

- Probably not practical to try and develop a continuous scaling model
- Technologies are discrete in their dependence on machine design

For each one,

Determine what scales

e.g. aperture



Hot Issue

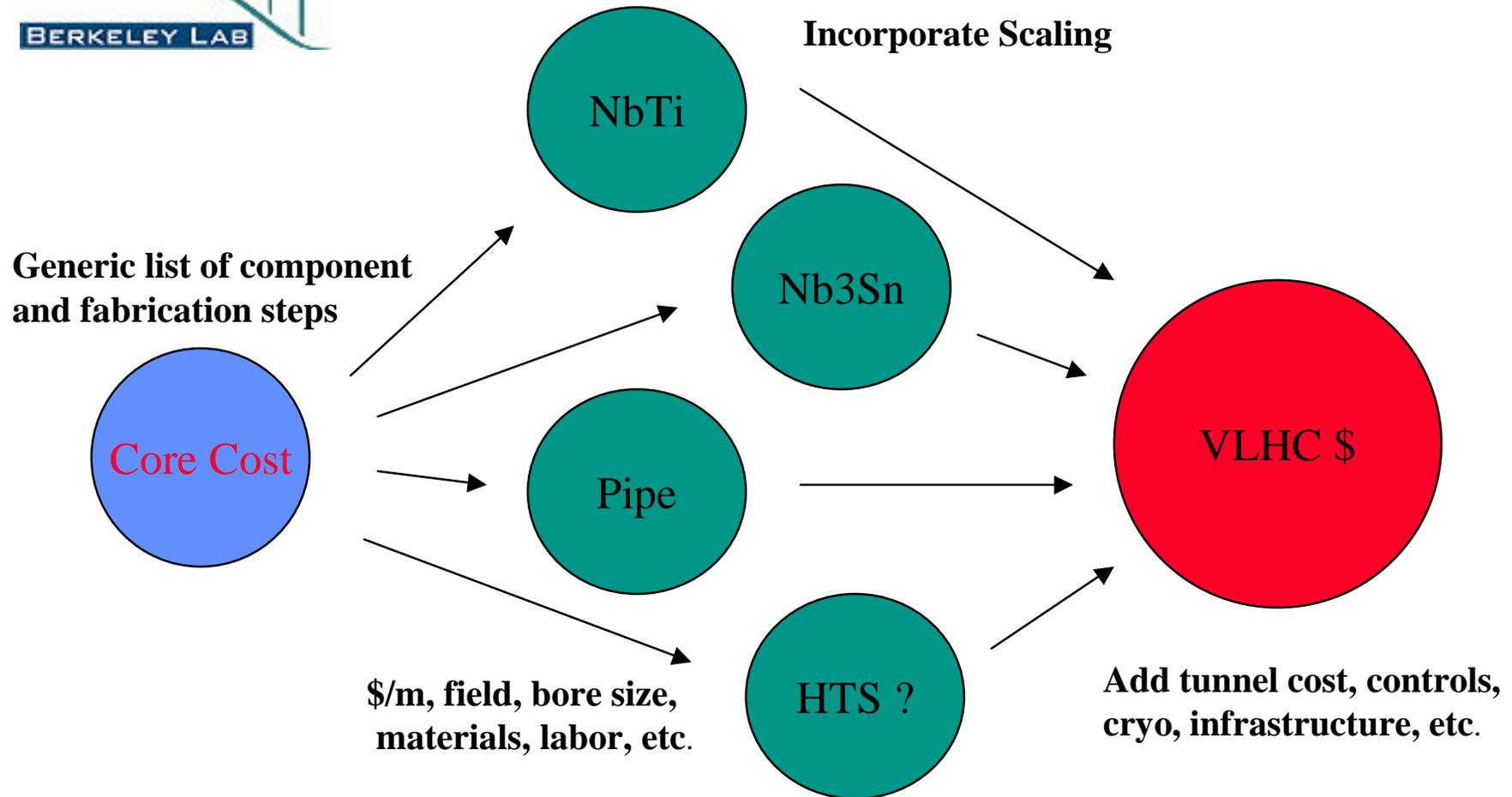
Magnet-Machine Interface

- Controversy is a reflection of perspective
 - Technology specific input requirements
 - e.g. Operating Temperature

No question that AP input is required



Cost Model Structure





Goal (?)

- Core cost breakdown
- Preliminary attempt at a scalable, tech specific, model

Prepare for Erice Workshop in March

– Bottom Line

- While we work on cost - **Keep Building Magnets!**