





Laserwire Path Forward

Vic Scarpine PIP-II Beam Instrumentation Laser Wire Final Design Review May 2, 2024

A Partnership of:

US/DOE

India/DAE

Italy/INFN

UK/UKRI-STFC

France/CEA, CNRS/IN2P3

Poland/WUST



Path Forward

- Generate mechanical drawings
- Get "first unit" built as soon as possible after drawings
 - Stand, vacuum chamber, optics boxes, magnets
 - Optics layout
- Test laser steering feedback in laser lab
- Continue laser pulse optimization
- Transitioning mechanical designer: Raul to Dakota



Conclusion

- No obvious show-stoppers for design
- Free-space design offers flexibility for future laser development
- Risks and safety have been evaluated and solutions integrated into design

