

IHEP ILC Cavity Status

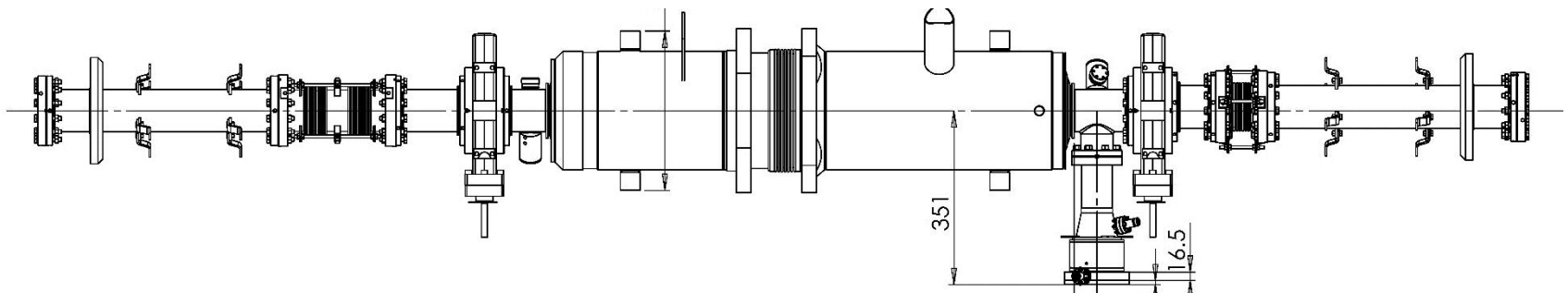
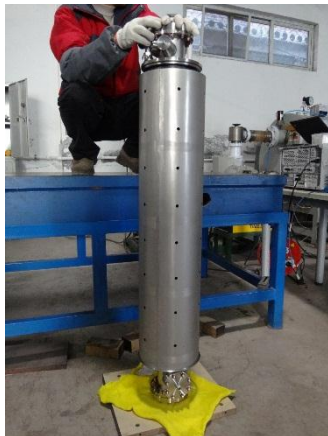
Jiyuan Zhai (IHEP)

on behalf of the IHEP ILC SRF Team

LCC ILC SRF Cavity Group 3rd Meeting

22.Jan.2014

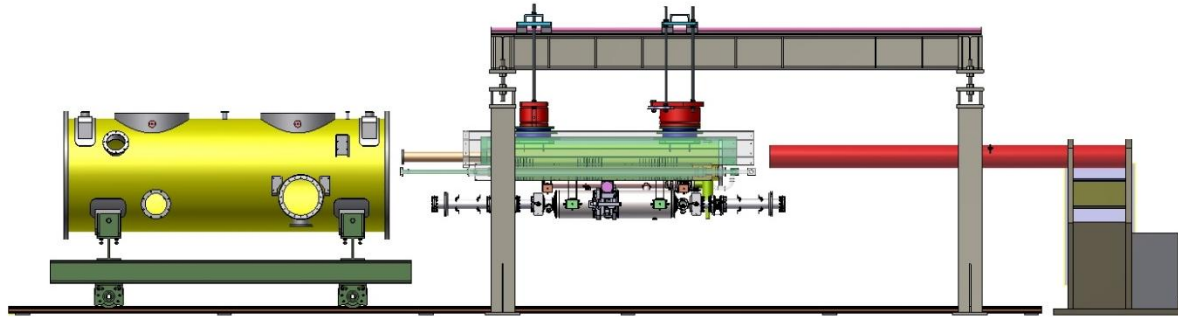
IHEP-02 LL LG Cavity Dressing



3 m long beamline to be assembled in cleanroom

IHEP ILC-TC1 Cryomodule Assembly

- Assemble in the new module assembly hall in Feb-April, 2014
- Horizontal test in 2015



New Cryogenic Plant and Power Source

2K Helium Plant (*Air Liquide*)

- vertical test commissioning in mid 2014 with new Dewar



Cold box and compressor (deliver next week)
refrigeration: 1000 W @ 4.5K, liquefaction: 284 L / h

Installed 2K pumps
(total) 8000 m³/h @ 3100 Pa

1.3 GHz 5 MW Klystron (*THALES*) and Marx Modulator

- funding approved in end 2014, plan to deliver in early 2015

Cavity Fabrication

- **IHEP-03 FG TESLA-like-shape Cavity**

IHEP-KEK collaboration

- End groups in fabrication
- Cavity EBW to be done in March



Dumbbells frequencies too high, will do reshape again

- **FG TESLA-shape Cavity**

- TESLA 9-cell cavity with full end groups
- Pressing and trimming jigs, EBW fixtures in fabrication
- In house machining and welding, processing and vertical test (but no EP facility and qualified HPR yet)

Thank you