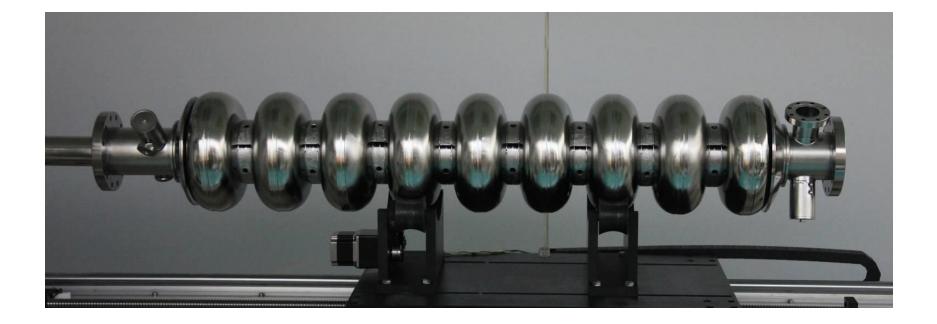
# Large Grain Cavity (PKU4) at Peking University

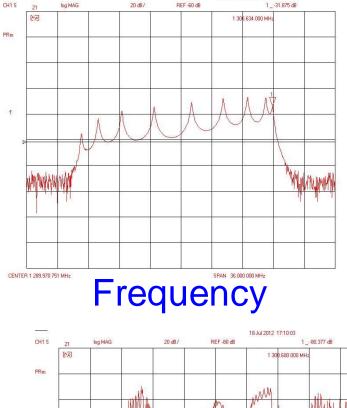
## Jiankui Hao & Kexin Liu

Institute of Heavy Ion Physics Peking University, Beijing 100871

2013/04/15

# **PKU4: 2<sup>nd</sup> large grain 9-cll cavity** (fabrication finished in July 2012)

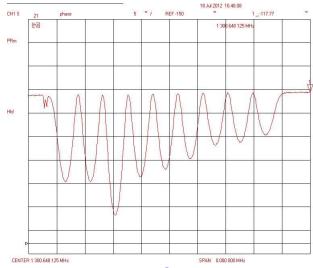




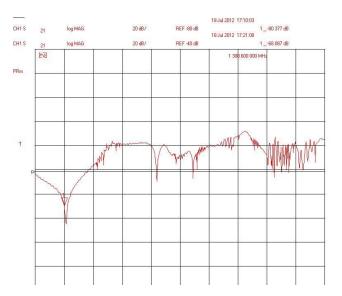
18 Jul 2012 16:31:13

# H1S 21 log MAG 20.d8/ REF-80.d8 1\_-80.377.d8 Brin 1 1 306500000 MHz 1 306500000 MHz

HOMs(pickup side)



**Field flatness** 

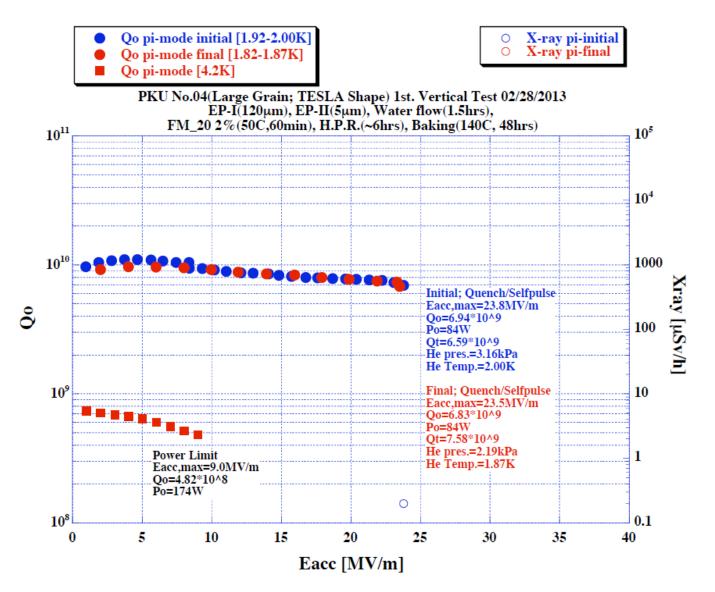


HOMs(FPC side)

# Vertical test: Collaboration with KEK

- Preparation at PKU
- Test at KEK: 1<sup>st</sup> cycle
  - Optical inspection, grinding if necessary
  - Pre-EP&EP (120 μm)
  - Optical inspection
  - 750 °C degasing/annealing: 3 hours
  - Field flatness tuning
  - Final EP (5  $\mu$ m)
  - HPR: 6 hours
  - Baking at 140 C: 48 hours
  - Vertical Test #1
  - Optical inspection

### **1st Vertical test**



### 2nd Vertical test

- Defect found around EBW seam.
- Optical inspection, local grinding
- EP this week
- Vertical test: scheduled April 22-26

### Next step

• EB welding with new machine at Ningxia



# Acknowledgement

**Thanks!** 

- Great thanks to KEK Colleagues for the cavity test E. Kako,
  - Y. Yamamoto,
  - T. Kubo,

. . .

- H. Hayano,
- A. Yamamoto,