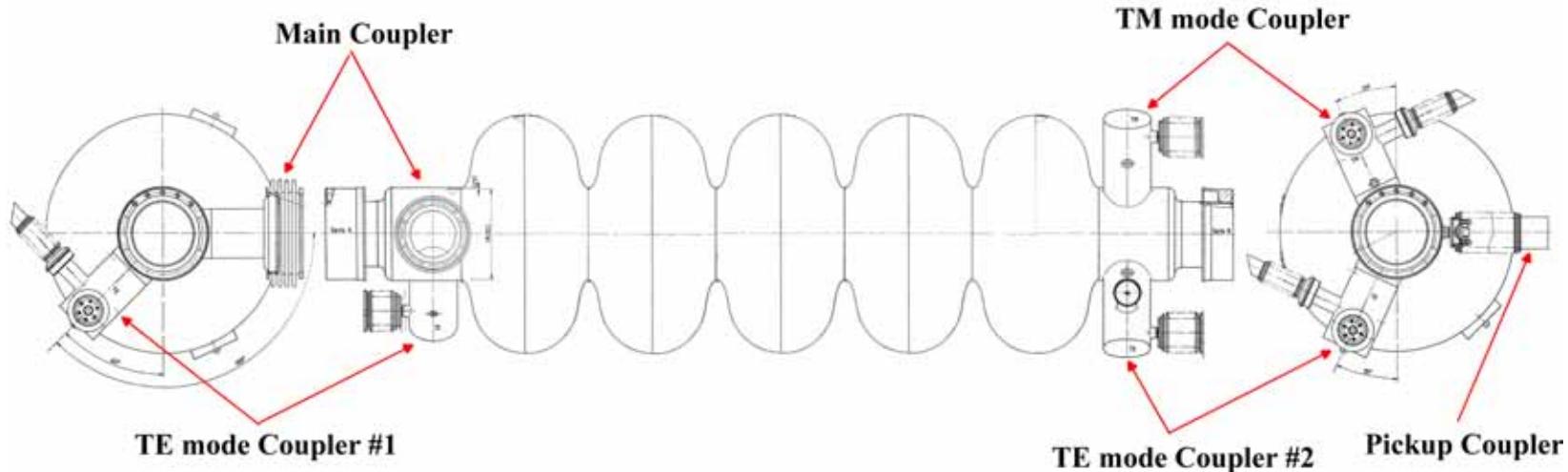


# Beam-based Alignment with HOM couplers

M. Sawamura and R. Nagai

JAERI

# JAERI SCA Cavity

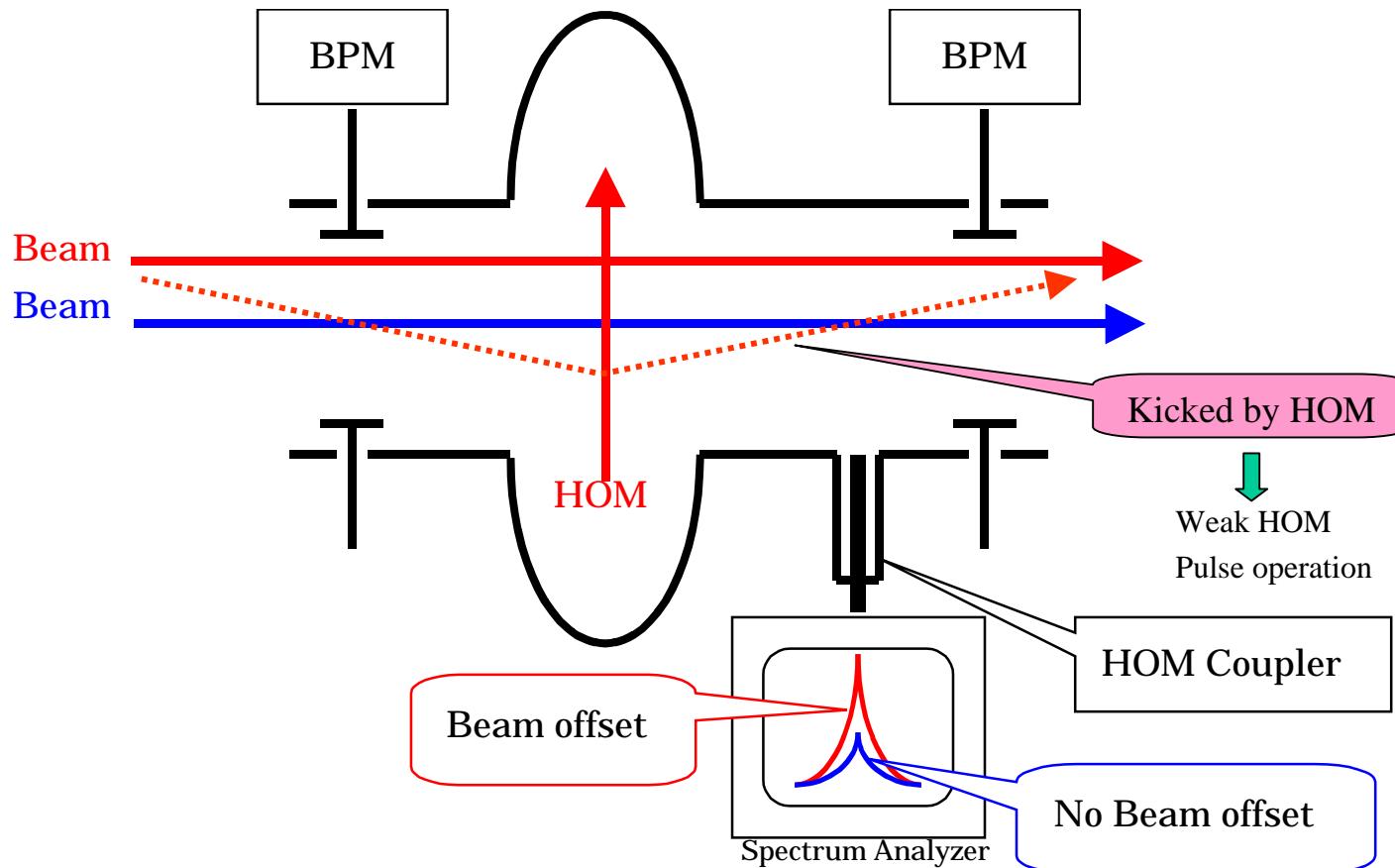


1 Main Coupler

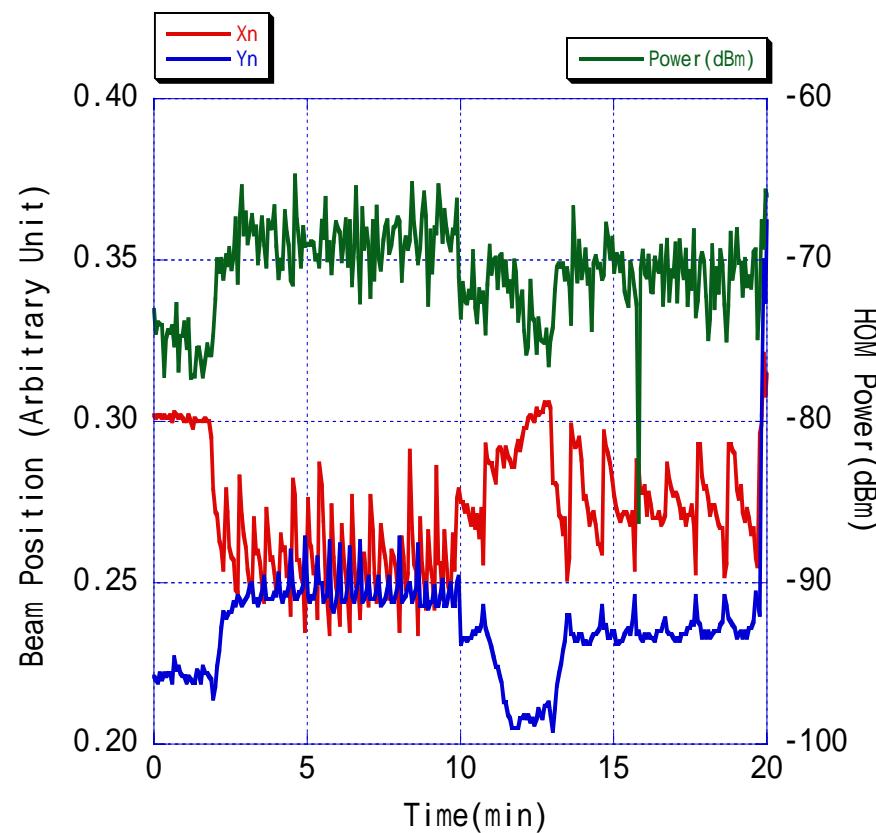
1 Pickup Coupler

3 HOM Coupler (terminated outside of cryomodule)

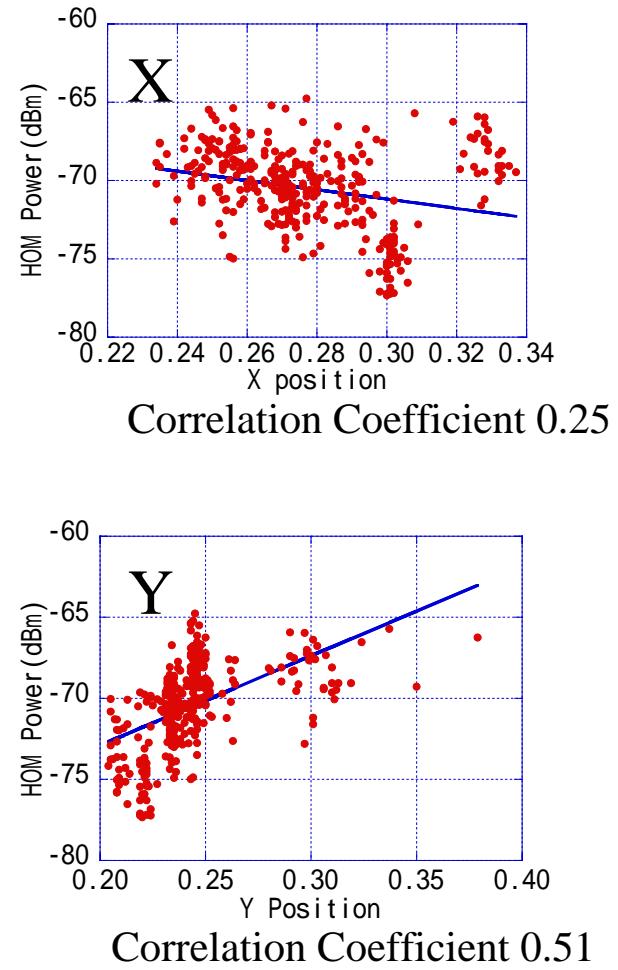
# Basic Idea of Beam based Alignment



# Beam Position vs. HOM Power



TE111  $2\pi/5$  mode



ERL2005

## Beam Position vs. HOM Power (cont.)

- Further measurement will be done later
  - Beam Position Monitor has not calibrated yet
  - Measure other mode
  - Larger beam position shift
  - Beam of the 1<sup>st</sup> pass only