# Main Interferometer Subsystem

KAGRA F2F on 2016/2/22 Y. Aso (NAOJ)



## Beam Splitter from CLIO



## TAMA Suspension + TAMA PRM as ETMs

- ROC = 9km
- High Gain (R=85%)
- Low Gain (R=48%)
- Michelson Contrast = 0.96



#### Fixed PR2

## Use a fixed 2-inch mirror

- A specially made mirror by SIGMA Koki
  - ROC = -3.0m +/- 20cm
- ROC error can be compensated with mirror position





## Beam diameters $(1 \sigma)$



### Preparation status for iKAGRA

- Electronics production -> done
- Electronics installation -> on going
- Realtime model for digital control -> exist (need to test)

Initial alignment work -> Michimura-kun's talk

- Two major challenges
  - Collimation
  - Put the beam through 3km
- The alignment work will start from 3/4 ?

Towards **bKAGRA** 

- Design of the MIF part is finished
- ITM AR polish to compensate for the inhomogeneity of the substrate
- AS port optics (OFI, OMMT, OMC)