

# Status of the Main Interferometer Subsystem

## Recent Progress

- PI Calculation is done for negative g-factor (K. Shibata)
  - Cross check with Yamamoto-san's calculation OK
  - HOM effect
  - A report is coming soon
- Noise modeling of the green laser lock (D. Tatsumi, K. Arai)
  - Residual frequency noise of the PLL lock between the main laser and the green laser will be the dominant noise source for the green lock
  - Ways to realize tighter lock of the PLL are discussed
  - Early hand-off of CARM to RF is also considered
- Amaldi proceedings paper for ISC submitted
  - Updated loop noise couplings with latest parameters
  - MICH noise coupling peak disappeared

## TO DO

- ASC calculation with the StackB suspensions
- More realistic noise modeling => paper
- Commissioning planing