Summary of 4/16/2015 discussion on laser system upgrades…

**2015 Summer SAD Goals**

Supports Fall 2015 and Spring 2016 program

* Laser
  + 3 conventional gain switched lasers
  + Seeds of same model and fabrication
  + Analog control of seed temperature
  + Separate chassis for each laser
  + Chiller cooling of laser chassis
  + All remote IPG amplifiers 3
  + Laser pickoff for phase detection
* RF
  + RF channels: 3 @ 250MHz + 1 (better 2) @ 499MHz
  + Phase monitoring relative to reference RF
  + 360 deg phase shifting
  + amplitude control
* Software
  + Communication between both styles of IPG amplifier

**2016 Summer SAD Goals**

Considerations for future 4-hall laser system

1. Laser technology (gain switch, digital gain switch, pulse picking)
2. New 4th laser
3. 4-laser SCAM module
4. Beam combination (10/90+cube, fiber combination)
5. RF requirements document