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