**September 6, 2017**

**Optical Stochastic Cooling WBS**

1. Administration (travel)
2. Modeling and simulation
	* electromagnetic radiation and undulators
	* lattice design
	* beam dynamics
	* bypass line
	* software development
3. Low energy operation of synchrotron and CESR and related machine studies
	* Dipole
	* quads
	* RF
	* injection
	* synchrotron
	* instrumentation
4. New Instrumentation (capital)
	* optical amplifier conceptual design
	* diagnostic instrumentation
5. Engineering design (capital)
	* Bypass magnets,
	* Bypass vacuum system
	* Optical system, amplifier, laser
6. Fabrication and installation
	* Bypass line magnets and vacuum system
	* Bypass line magnet stands, infrastructure
	* optical amplifier and related vacuum equipment