



S²MARTS Project: Advanced Scanning Optical Microscope (ASOM) Capabilities
Request For Solutions (RFS) Question & Answer | Date: May 21, 2021

1. Question: Can you provide a little more information about the desired functionality of the non-linear optics? Are they for power stabilization or multi-photon generation?

Answer: The non-linear effects are for multi-photon generation (electron hole pairs). Mostly created by two photon absorption with femto second pulses.

2. Question: What do you consider "modular" - the ability to rapidly change out a beamline, source, target, chamber, detector(s)?

Answer: Modular shall be understood in this situation as a system that will be built on a large optics table with optical components easily added/removed to change functionality/capability without needing to completely re-design the system.

3. Question: What are the size constraints of the physical prototype (expectation), prototype beamlines can take up a significant amount of space depending upon the eV?

Answer: This system should be built on an optics table that is roughly 4' x 6'.