Scattered Light and the Laser Wavelength

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- Laser wavelength is an important **input** for the mitigation system (i.e. for the scattered light workpackage)
  - Design has to be adapted
  - For 2 µm less literature values expected. Verification required anyways.

- Some first order conclusions:

  → Tube diameter depends on WL (costs)

  → Noise cut off inversely proportional to WL $\propto \frac{2\dot{x}}{\lambda}$

  → Lower scattering from mirror roughness at higher WL

- Higher wavelength preferred
- Upgrade option has to be considered