

Q&A

- Q1: How can you distinguish between subradiance and radiation trapping ?
- A1: dependence with the pulse detuning. In subradiant phenomena, time constant is not dependent with the detuning, however, when it comes to radiation trapping, it has strong dependence with the detuning.
- Q2: what is experimental difference between subradiance and radiation trapping ?
- A2 : although I read a paper of radiation trapping experiment, it is hard to find the big difference. The meaningful difference I could find was optical depth. Subradiance experiment was done with around 10 times bigger on-resonant optical depth than radiation trapping experiment's.
 - Phys. Rev. Lett. 91,223904 (2003).
- Q3: Is there any theory describing radiation trapping?
- A3: theoretical works on radiation trapping were done using multiple scattering in the optically dense medium.
 - J. Phys. A: Math. Gen. **35** (2002) 10163–10188