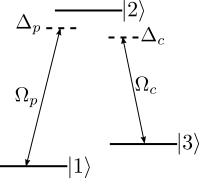
Cheat sheet 1: Basics of EIT – Static case



# Eigenstates and –energies

**Parameters for EIT regime**:

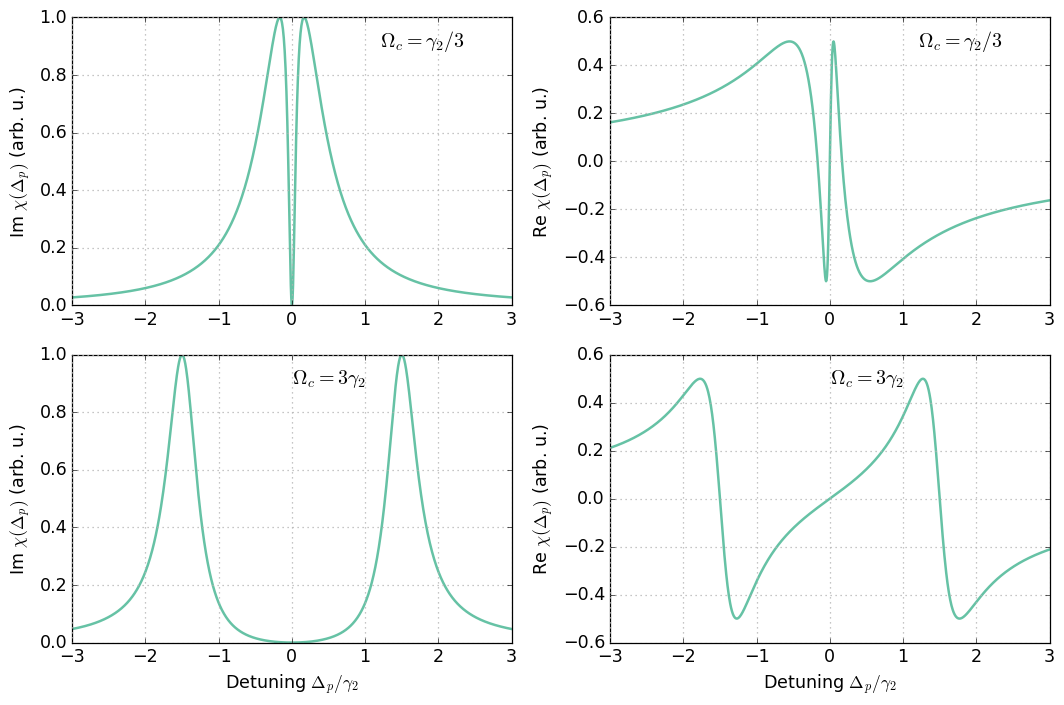
# Optical response for weak probe field

1. Master equation:   
    (: Lindblad superoperator for decay/dephasing)
2. Consider perturbative regime: small and .

Induced atomic polarization: where : decoherence rate of ,

Remember: absorption, refractive index

# Example plots for



# Further reading (optional)

1. Fleischhauer, M., Imamoglu, A. & Marangos, J. Electromagnetically induced transparency: Optics in coherent media. *Rev. Mod. Phys.* **77,** 633–673 (2005).