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Course: **8.421 - AMO I**
Problem set: **#12**
Due: Monday, May 9, 2022.

1. Bragg Scattering

1. Two-Photon Stimulated Raman Process

- (a)
- (b)
- (c)
- (d)
- (e)

2. AC Stark Shift

- (a)
- (b)

2. Spontaneous Two-Photon Emission

1. The Göppert-Mayer formula.

- (i)
- (ii)
- (iii)
- (iv)

2. $2S$ natural lifetime.

- (i)
- (ii)