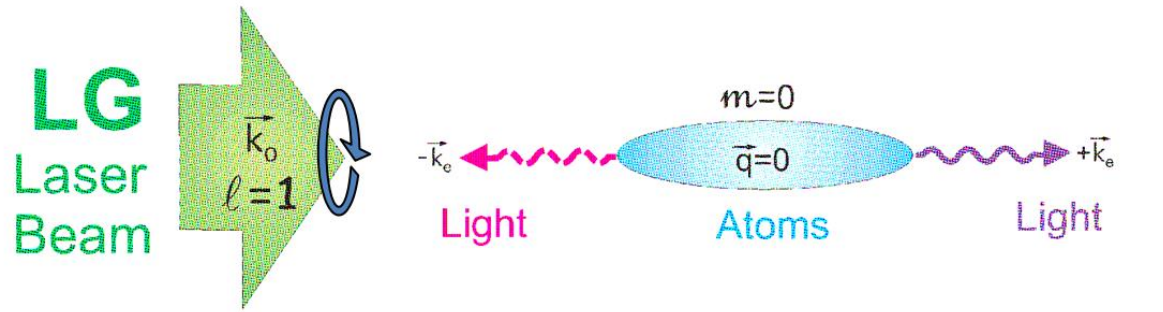
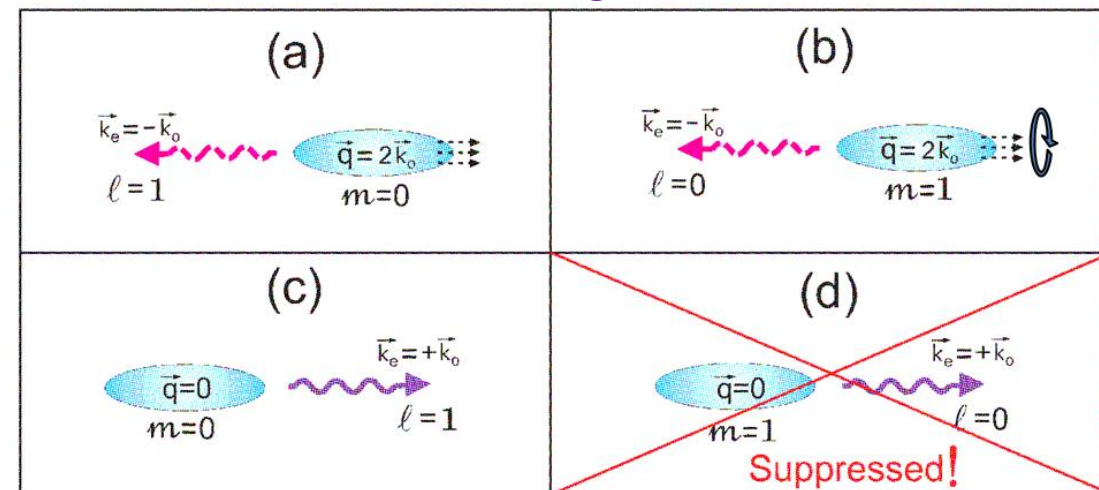


Vortex in BEC by Laguarre-Gaussian laser via Superradiant emission

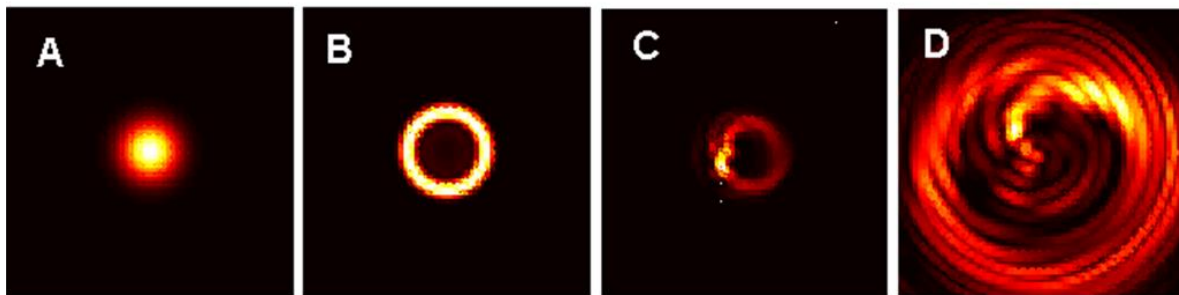


BEC illuminated with a LG mode laser
(carries Orbital Angular Momentum)

Possible scattering modes in BEC



[1] M.E. Taşgın, Ö.E. Müstecaplıoğlu and L. You,
Physical Review A **84**, 063628 (2011).



initial
BEC

normal
Superradiant
happens in
BEC

azimuthal
symmetry
breaking
happens

Rotatory
Superradiance
starts

normal
Superradiant
happens in
BEC

