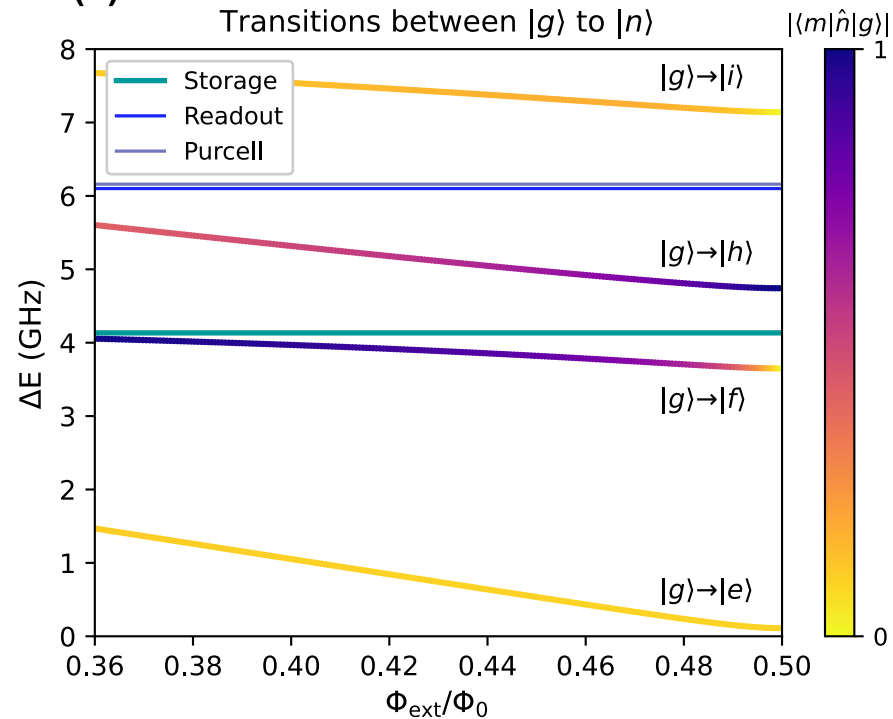
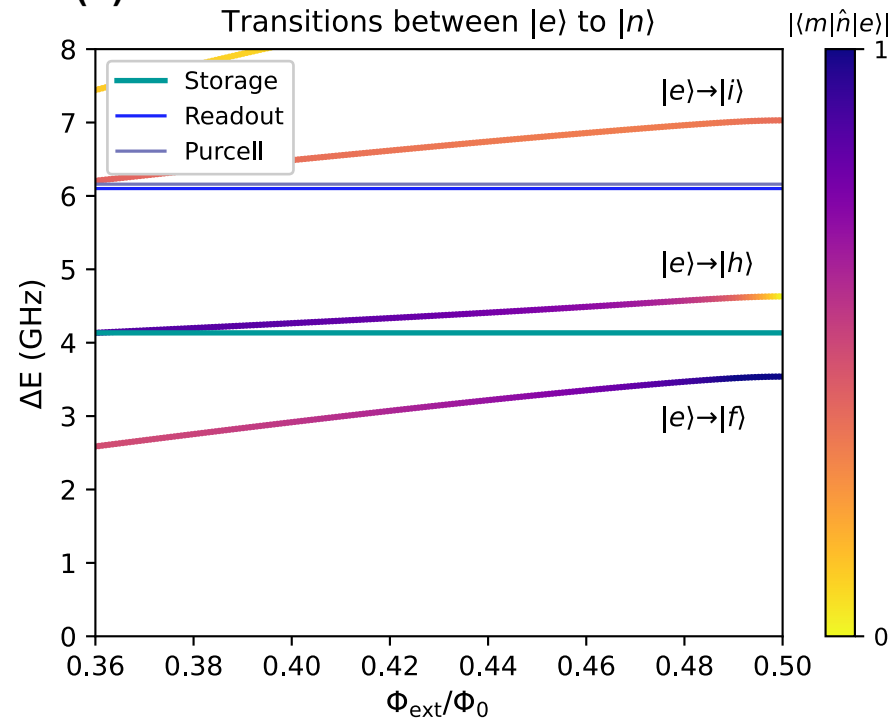


**(a)**Transitions between  $|g\rangle$  to  $|n\rangle$ **(b)**Transitions between  $|e\rangle$  to  $|n\rangle$ **(c)**

Storage Dispersive Shift &amp; Kerr Nonlinearities

