Q. What would happen w/o driving field (w/ only cavity field)

Considering ϕ, we can say there is no phase difference along the x-axis.

$$\phi = \Delta n_x \frac{\lambda_{trap,x}}{\lambda_{atom}} \pi + \left(n_{y_1} - n_{y_2}\right)\pi$$

This implies us that only cavity mode field mode phase would govern the interference between two atoms. The phase difference between those two atoms would alternate from 0 to π. And that will give us the similar result for this experiment.

Now considering our experimental set-up, we only have cavity probe field and atoms are passing through the cavity mode. Confining atomic position passing through cavity mode, we can make effective optical lattice case as mentioned above. If that so, we can expect to get such data like in this paper. But we are not really using confined atoms with specific position this would fade the effect like this paper

We are not using ensemble atoms and interaction with cavity mode for very short times and passing the mode with velocity profile would cause the consequence. Moreover many atom situation shall critically decreasing the effect from interference between two atoms.

Q. What would happen w/o driving field (w/ only cavity field)

However, if we only concern the case of $\phi = 0$, they argued that the suppression of photon emission for two atoms case. That happened because of driving field and cavity mode field destructive interferes around an atom so that the emission is suppressed like one atom case. But for us, it would be hard to control intra-cavity atom numbers to two with $\phi = 0$. Even though not perfectly suppressing the emission rate from atoms we can be expected little bit of suppression effect from interference of atoms inside the optical cavity.