## **PY4T01 Condensed Matter Theory: Tutorial 2**

1. Calculate the band dispersion for the following infinite molecular chain



Consider only  $\delta > 0$  and study the bands as a function of  $\delta$ .

2. Calculate the band dispersion for the following infinite molecular chain



Study the bands in the limit of  $\gamma_1 \rightarrow 0$ .

– Typeset by  $\mathsf{FoilT}_{\!E\!X}$  –