



FIG. 2: A finite solenoid with idealised field cancellation above and below the inner region together with the static magnetic field (green), the axion-induced oscillating  $\vec{P}_a$  and  $\vec{M}_a$  fields (blue and red) and the axion induced oscillating  $\vec{E}_a$  and  $\vec{B}_a$  fields outside the DC magnetic field (pink and orange).