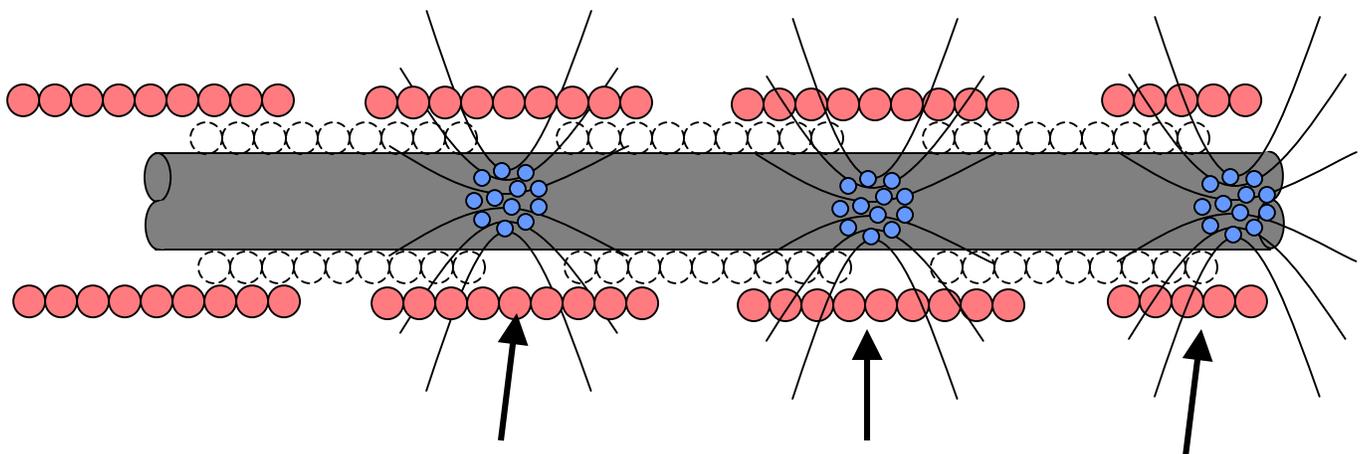


Alternate coils energized in reverse polarity



Overlapping coils now energized, bunches have moved

If we energize the coils with a sine wave, with the outer coils phase shifted by 90 degrees from the inner coils, we create moving magnetic peaks and nulls hence moving electron bunches. Although alternate bunches have alternate spin polarizations, the moving bunches represent a net flow of charge in one direction, hence a DC current.