

Answer on Question #45713 – Physics – Electromagnetism

Question.

- Conventional current is the flow of negative charges
- positive charges
- both charges
- neither type of charge

Solution.

An electric current is a flow of electric charge. A flow of positive charges gives the same electric current, and has the same effect in a circuit, as an equal flow of negative charges in the opposite direction. Since current can be the flow of either positive or negative charges, or both, a convention for the direction of current which is independent of the type of charge carriers is needed.

The direction of conventional current is arbitrarily defined to be the same as the direction of the flow of positive charges.

So, conventional electric current is the flow of positive charges. But it's only a definition to choose the direction.

Answer.

- positive charges