

Answer on question #44115, Physics, Electrodynamics

A person walks by. And the person contains electrons. Therefore, there is a presence of current. Either yes or no justify this statement with reason.

Solution:

By definition an electric current is an ordered flow of electric charge. The motion of electrons in the body remains chaotic either person is walking or stay motionless. So it is no current in walking person.

Another situation is possible if the person has positive or negative electrical charge. Then the person's movement means an ordered flow of charge in the space (but not in person!), which actually the current is.