

Answer on Question #46017, Physics, Electromagnetism

The electric potential difference between two points A and B is 42 V. What is the work done by an external agent in carrying a charge of $50 \cdot 10^{-5}$ C from A to B at constant speed?.

Solution

Work is equal to change of energy

$$W = e \cdot U = 50 \cdot 10^{-5} \cdot 42 = 210 \cdot 10^{-5} J$$