Electric Charge is not a Seperate Entity

Abstract: The quantization of energy is due to the existence of smallest unit of energy. This leads to quantization of electric charge. We find that electric charge is equivalent to mass.

The electrical potential energy between two electrons seperated by distance r=CT. One electron is placed at the centre of the universe and the other electron is placed at the edge of the universe at maximum radius r=CT.

The electrical potential energy between two electrons is given by $E=e^2/4\pi\epsilon\, r$

$E=e^2/4\pi\epsilon CT$

The universe has maximum radius r=CT. The distance between electrons greater than r=CT is not possible. Therefore this is the smallest electrical potential energy. The energy unit smaller than this does not exist.

$mfl\, C^2=e^2/4\pi\epsilon\, CT$

$mfl=e^2/4\pi\epsilon C^3 T$

This is the mass of smallest energy unit.

The force of repulsion between two charges q1=n1e, and q2=n2e is given by

$F=q1q2/4\pi\epsilon\, r^2$

$F= (T/mfl\, C)\, E1\, E2/\, r^2$

Where E1=n1 mfl and E2= n2 mfl

We find that the force of repulsion between two charged particles depends on the mass of the smallest energy unit. Therefore electric charge is not a seperate entity, it comes from mass. We need to develop electromagnetism theory based on three fundamental units length, mass and time.

References:

1. Wikipedia