... when Einstein introduced his formula

$$e = m \cdot c^2 \,, \tag{1}$$

which is at the same time the most widely known and the least well understood physical formula. ... from which follows Kirchhoff's current law:

$$\sum_{k=1}^{n} I_k = 0. (2)$$

Kirchhoff's voltage law can be derived . . .

... which has several advantages.

$$I_D = I_F - I_R \tag{3}$$

is the core of a very different transistor model.