

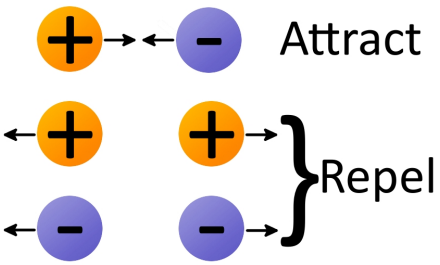
André-Marie Ampère (1775 – 1836)

The flow of electric charge is named electric current. Maybe you heard something about electric current and in addition to this about the measure ampere (A) in your every day life, too. But do you know or asked yourself after what this measure is named? If not, here is the answer: after the founder of electrodynamics- after André-Marie Ampère.

He was a French physicist and mathematician who lived during the height of the French Enlightenment. During the French revolution the 12 years old André started teaching himself mathematics. When he was 18 he was able to claim that he knows much more about mathematics and science than people in his surroundings. So 1799 he became teacher for mathematics. This job gave him financial security so he got the chance to marry Julie Carron. The changes of the revolution offered him many possibilities to learn more about technocratic structures and he was favored by the new emperor. 1802 he became professor of physics and chemistry.

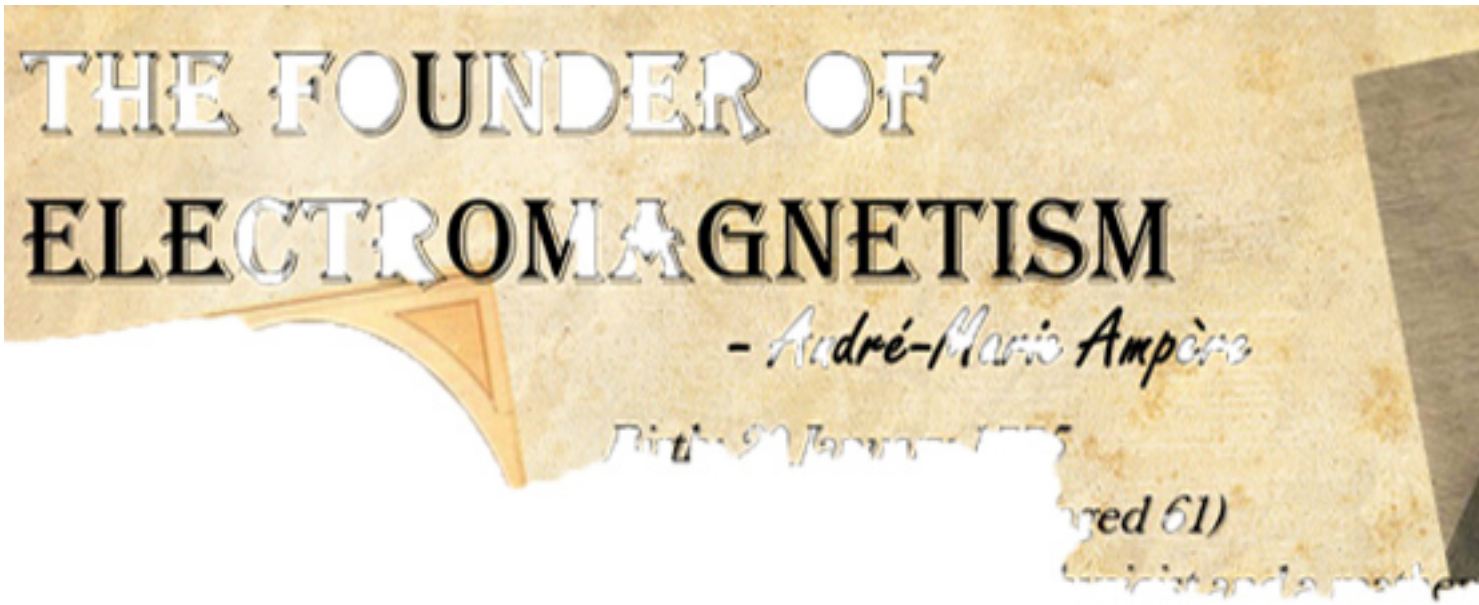
After the death of his wife he moved to Paris and became teacher of mathematics and additionally he offered courses in philosophy and astronomy at the university. In this city he got

the chance to work intensive in the physical area. 1820 a friend showed the members of the French Academy of science that magnetic needle is deflected by an adjacent electric current.



For this reason Ampère noticed of the development of the electromagnetism and he began to think about and start to do experiments in this area. As a result of this he developed a physical as well as mathematical theory to understand the relationship between electricity and magnetism. He was able to show that two parallel wires carrying electric current are starting to attract or repel each other; additionally this just depends on the currents flow- means if the flow is the same(attract) or different (repel) directions. All in all he gave the foundation of the electrodynamics. Afterwards he applied this principle to magnetism and mathematics.

To sum up Ampère created the laws of electromagnetism. He found out that electric current has some identical characteristics with magnets, so it is the cause of magnetism. He also developed a tool to measure the electric circuitry- the **galvanometer**.
He wanted to publish his knowledge as good and much as possible. For this reason he published the book: "Mathematic Theory of Electrodynamic Phenomena" (1827). He also used this new knowledge for teaching.
All in all he gave lots of physicists, mathematician and scientists in general the possibility and opportunity to build new knowledge and scientific findings on this foundation. For all of this reasons people decided to name the measure of the electric current after him.


THE FOUNDER OF
ELECTROMAGNETISM
- André-Marie Ampère