

Answer on Question #57367-Physics-Other

Briefly describe the history of the metric system as it applies to the meter and how the definition of a meter has changed over time.

Breaking it down into parts of,

Who ordered the development. How was the meter originally defined.

The two men that surveyed the distance

Today's definition.

Answer

In 1670 Gabriel Mouton, Vicar of St. Paul's Church and an astronomer proposed the swing length of a pendulum with a frequency of one beat per second as the unit of length.

In 1791 the Commission of the French Academy of Sciences proposed the name meter to the unit of length (from the Greek word metron, which means "a measure"). It would equal one tens-millionth of the distance from the North Pole to the equator along the meridian through Paris. It is realistically represented by the distance between two marks on an iron bar kept in Paris.

In 1889 the 1st General Conference on Weights and Measures define the meter as the distance between two lines on a standard bar that made of an alloy of 90% platinum with 10% iridium.

In 1960 the meter was redefined as 1650763.73 wavelengths of orange-red light, in a vacuum, produced by burning the element krypton (Kr-86).

In 1984 the Geneva Conference on Weights and Measures has defined the meter as the distance light travels, in a vacuum, in $1/299792458$ seconds with time measured by a cesium-133 atomic clock which emits pulses of radiation at very rapid, regular intervals.

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