

The Measure Of All things

The Redefinition of the SI

14:00-15:00, Saturday 13 October 2018,
Hatton Wood Room, Kennaway House, Sidmouth EX10 8NG

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Measurement is at the heart of all science and engineering. And progress in science and engineering is often linked to progress in metrology - the science of measurement. After all, if we cannot measure something then we cannot begin to understand it (science) or improve it (engineering).

Measurement is the quantitative comparison of an unknown quantity with a standard. In the International System of Units - the 'SI' - there are seven standard quantities called the 'base units': the second, metre, kilogram, ampere, kelvin, candela and mole. Some of these, such as the second, the metre and the kilogram, we encounter in everyday life. Amazingly all the physical measurements we make can be traced back to combinations of these 'base units'.

In this talk Andrew will explain the how the International System of Units works, and why, from May 2019 scientists are planning subtle but profound changes in the definitions of four of these base units - the kilogram, ampere, kelvin and mole.