



METROLOGY & YOU

Nature Research invites you to join the World Metrology Day celebrations marking the new International System of Units coming into effect on 20 May 2019.

PUBLIC LECTURE:

The making of the new International System of Units

Dr. Steffen Rudtsch
Physikalisch-Technische Bundesanstalt (PTB)
Braunschweig and Berlin

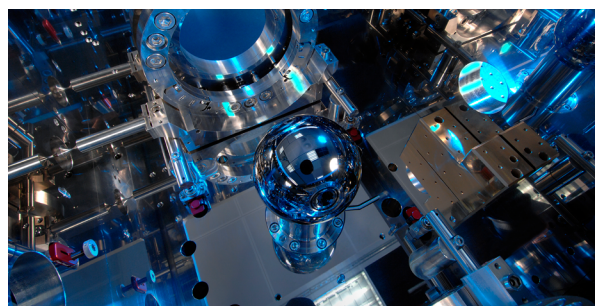
On 16 November 2018 the General Conference for Weights and Measures agreed on the biggest revision of the International System of Units (SI) in its history. The new SI is based on a set of seven fundamental constants: the velocity of light, the elementary charge, the Boltzmann, Avogadro and Planck constants, the caesium hyperfine clock transition and the luminous efficacy. The attribution of numerical values to these constants is sufficient to define all the SI base and derived units. Scientists can now choose the technique they want to employ for the practical realization of the units, thus allowing them to anticipate future developments. The talk gives an overview on the revised SI, its advantages as compared to the previous definitions and discusses in particular the changes in the definitions of the kilogram, ampere, kelvin and the mole, and how the revision affects our daily lives—or not. Finally, an outlook into future perspectives for innovative developments is presented.

PRE-PROGRAM:

Metrology quanta

Research pitches by Berlin PhD students

The lecture will be followed by a networking reception.



Avogadro Project silicon sphere
Physikalisch-Technische Bundesanstalt

DATE 20 MAY 2019

DOORS OPEN 18:00

START 18:30

PLACE Springer Nature, Heidelberger Platz 3, 14197 Berlin
(S-Bahn/U-Bahn Heidelberger Platz)

FREE ENTRY

PLEASE REGISTER AT

<https://go.nature.com/worldmetrologydayberlin>

The language of the event will be English.