

## **Quantum Hall Effect and Metrology**

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The discovery of the quantum Hall effect (QHE) opened the possibility to establish (together with the Josephson effect) a platform for stable and reproducible electrical units based on fundamental constants. These quantum phenomena are successfully used in metrology outside our present international system of units (SI units). The expected change of our SI system in 2018 will be based on constants of nature so that also the quantum standards in electricity will be integrated in the new SI. The talk summarizes the applications of the QHE in metrology, starting with the discovery in 1980.