

## Short news from the CCT

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CIPM Member

**Bureau**  
International des  
Poids et  
Mesures



*Meeting of CCT October 2019*

# Consultative Committee for Thermometry (CCT)

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24 members

7 working groups

1 observer

3 task groups

Met at the TEMPMEKO conference in Chengdu (China) June 2019

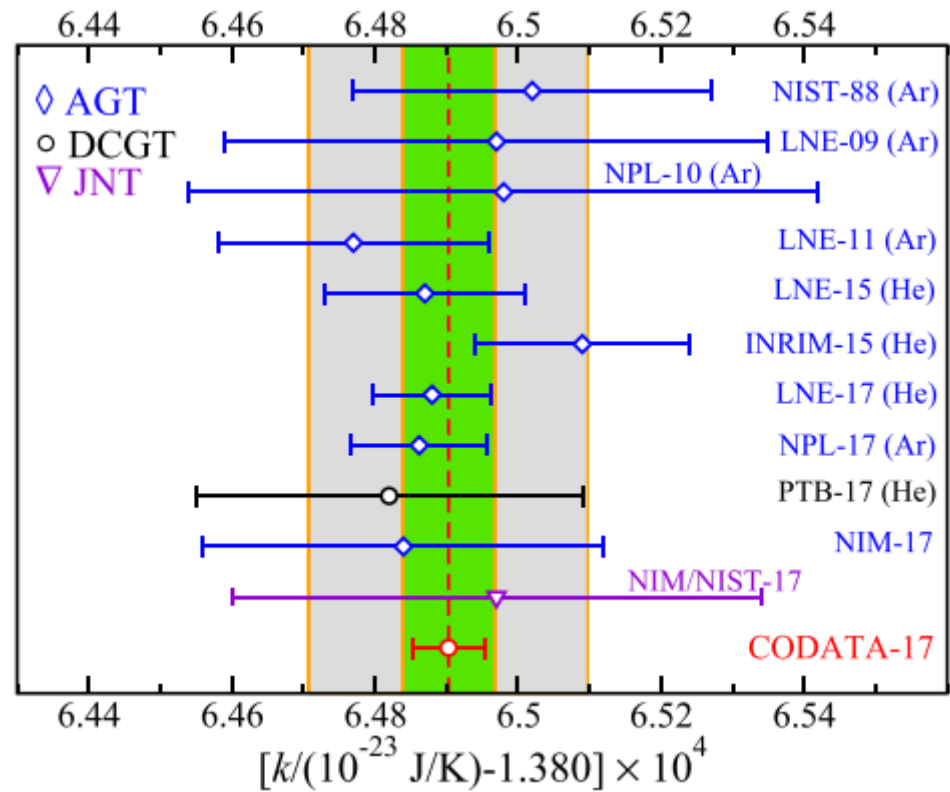
Next CCT meeting in March 2020

# Consultative Committee for Thermometry (CCT)

*CODATA special adjustment 2017*

$$k = 1.380\,649 \times 10^{-23} \text{ J/K}$$

$$T_{\text{TPW}} = 273.16 \text{ K} \quad u(T) = 0.1 \text{ mK}$$



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*Mise en Pratique:* Acoustic Gas Thermometry  
Radiometric Thermometry  
Polarizing Gas Thermometry:  
    Dielectric Constant Gas Thermometry  
    Refractive Index Gas Thermometry  
Johnson noise Thermometry

# Consultative Committee for Thermometry (CCT)

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- ITS-90 still valid - no revision of the temperature scale expected within 10 y (weigh disturbance to industry/science against potential benefits)

## Activities on

- Measurements of  $T - T_{90}$
- Improvements of present standards or developing own standards
- Make the *MeP* a reality: particular activities on < 25 K and 600 K ... 3000 K
- Issues on ban of Hg (234 K)

# Consultative Committee for Thermometry (CCT)

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- No concerns raised about the redefinition. On the contrary, practical primary thermometry is appealing to stakeholders in some circumstances, and moving away from a defined scale to thermodynamic temperature was also attractive.
- But... text books for school pupils need potentially to be reviewed – publishers indicate that the task is difficult to clearly explain the abstract definition of the kelvin.
- SI brochure is translated into Korean.

Thank you.

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