

Agenda
for the 30th meeting of the CCEM to be held at the BIPM
22 and 24 March 2017

Meeting begins at 14:00 on Wednesday, 22 March 2017

- 1. Welcome, introduction, agenda**
- 2. Actions arising from the minutes of the 29th CCEM meeting in 2015**
- 3. News from the CIPM and BIPM**
- 4. Matters related to fundamental constants and the SI**
 - 4.1 Report of the CCEM working group on electrical methods to monitor the stability of the kilogram, WGKG
 - 4.2 Report from the CCEM working group on proposed modifications to the SI, WGS1
 - 4.3 Report from the CODATA task group on fundamental constants
 - 4.4 Report from the CCU on the preparations for the planned redefinitions
 - 4.5 Proposal on the unit var
- 5. Report of the CCEM Working Group on Low Frequency Quantities, WGLF**
 - 5.1 Status of the ongoing, planned and proposed CCEM comparisons at dc or low frequency ac
 - 5.2 Other information from WGLF
- 6. Report of the CCEM Working Group on Radiofrequencies, GT-RF**
 - 6.1 Status of the ongoing, planned and proposed CCEM comparisons in the RF range
 - 6.2 Other information from GT-RF
- 7. Report of the CCEM Working Group on RMO Coordination, WGRMO**
 - 7.1 CIPM MRA: CCEM actions
 - 7.2 Update on the proposed changes of the CMC categories 8 and 9
- 8. Review of the CCEM strategic objectives**
 - 8.1 Update of the CCEM strategy document
 - 8.2 Review of “Future Challenges” workshop - update of the “Big Challenges” document
- 9. Report on the work programme of the BIPM electricity laboratories**
- 10. Highlights of scientific developments from the laboratory reports on new activities in electricity and magnetism**
 - 10.1 Presentation “Practical Quantum Realization of the Ampere”, Dr Poirier, LNE
- 11. Review of membership**
 - 11.1 Review of membership and chairs of CCEM working groups
 - 11.2 Requests for membership or observership of CCEM
- 12. Miscellaneous questions**
 - 12.1 Liaisons with other organizations
 - 12.2 Draft agenda for next CCEM meeting
- 13. Approximate date of the next meeting**

**CCEM workshop “Future challenges in electrical metrology”
to be held at the BIPM, Thursday 23 March 2017**

Workshop Programme

- 9:00 Opening by the CCEM president
- 9:10 *“Measurement challenges in quantum technology”*, Dr J.T. Janssen, NPL
- 10:00 *“NMI on a chip”*, Dr J. Olthoff, NIST
- 10:50 Coffee break
- 11:30 *“Challenges in nanomagnetism and spintronics”*, Dr M. Pasquale, INRIM
- 12:20 Lunch
- 13:30 *“The needs and challenges of electrical measurements for micro/nanoelectronic devices”*, Prof. B. Gautier, INL
- 14:20 *“Future challenges in high-frequency electromagnetic metrology (RF to terahertz)”*,
Dr N. Ridler, NPL
- 15:10 Tea break
- 15:40 *“The future of electrical power and Smart Grids”*, Dr P. Wright, NPL
- 16:30 Closing discussion
- 17:00 End of workshop