## NIST – BIPM Workshop on Low Electrical Current Measurements

The next generation of ionization chambers for radionuclide metrology

## Bureau International des Poids et Mesures

## Thursday 13 September 2018

Registration	8:30
Welcome from NIST (Carl Williams, Physical Measurement Laboratory, NIST)	9:00
Aims of the workshop and introductions (Steven Judge, BIPM)	9:15
Session 1: Ionization Chambers (Chair: Steven Judge, BIPM)	
Applications of ionization chambers in radionuclide metrology (Denis Bergeron, NIST)	9:30
How an ionization chamber works (Carine Michotte, BIPM)	10:00
Coffee & tea break	10:30
Session 2: Electrical Current Measurement (Chair: Pierre Gournay, BIPM)	
Overview of Single Electron Tunneling technology (Neil Zimmerman, NIST)	11:00
Ultrastable low-noise current amplifier(s) (ULCA) (Hansjörg Scherer , PTB)	11:20
Conventional low-current measurement techniques (Steve Giblin, NPL)	11:40
Afternoon Workshop (Chair: Ryan Fitzgerald, NIST)	
Briefing on afternoon workshop (Ryan Fitzgerald, NIST)	12:00
Lunch	12:15
Workshop – breakout groups	13:15
Coffee & tea break	15:00
Summaries from groups	15:30
Conclusions and next steps	16:15
Close	16:30

