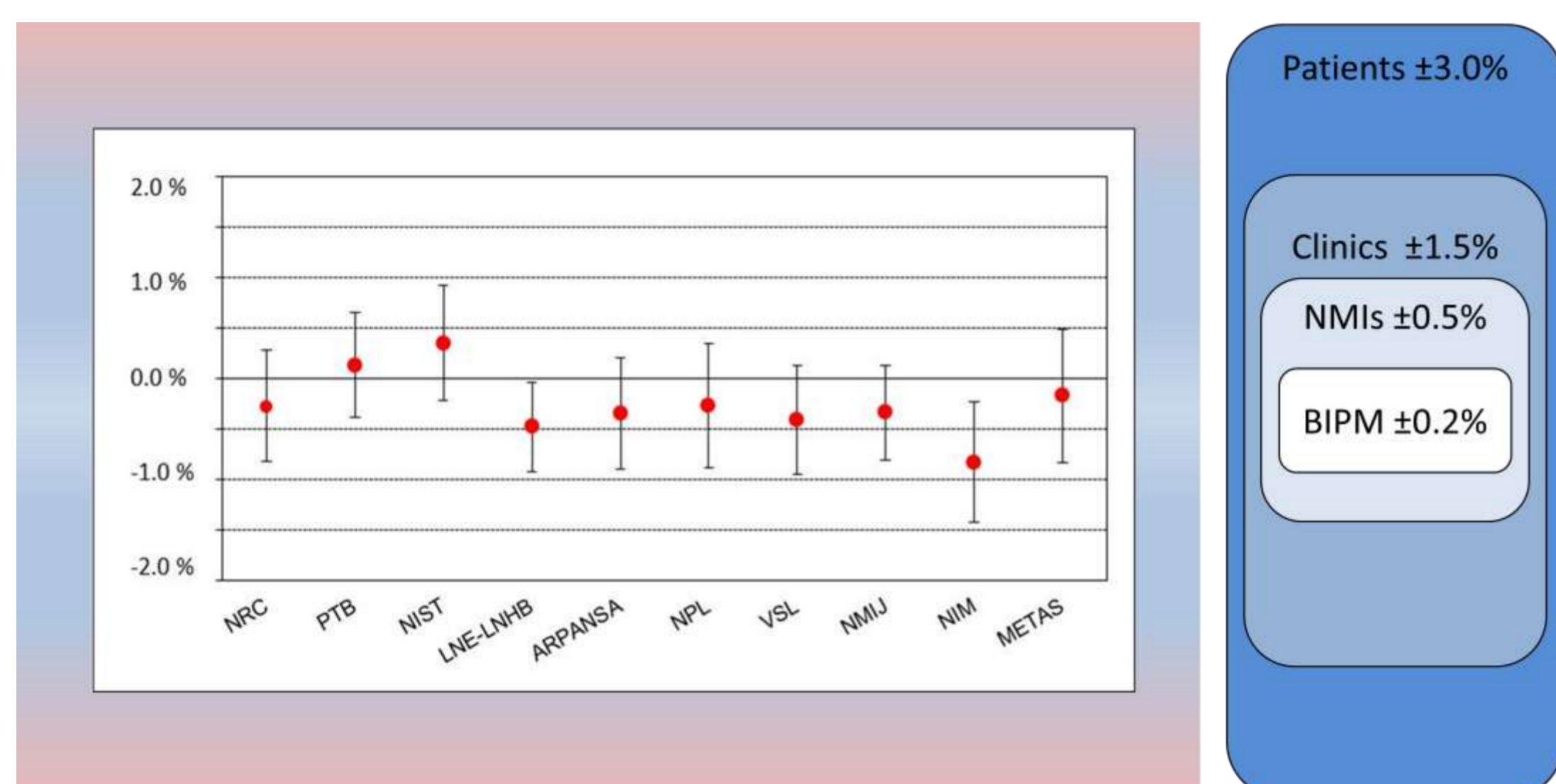


Implementing the new strategy for sharing resources

BIPM, CCRI, DOSEO, IAEA

The BIPM is working with national and international facilities to set up new comparisons and to ensure services continue into the long term.



Results from a BIPM comparison of radiotherapy standards for high-energy photons, including measurements at DOSEO. For patients, an over-treatment by as little as 3 % can result in severe side effects.

Improving medium-energy x-ray standards for radiotherapy

BIPM, CCRI

An innovative new BIPM technique for medium-energy x-ray standards has improved measurements in hospitals (reducing the measurement uncertainty for clinical measurement from 3 % to 0.7 %).

Running comparisons

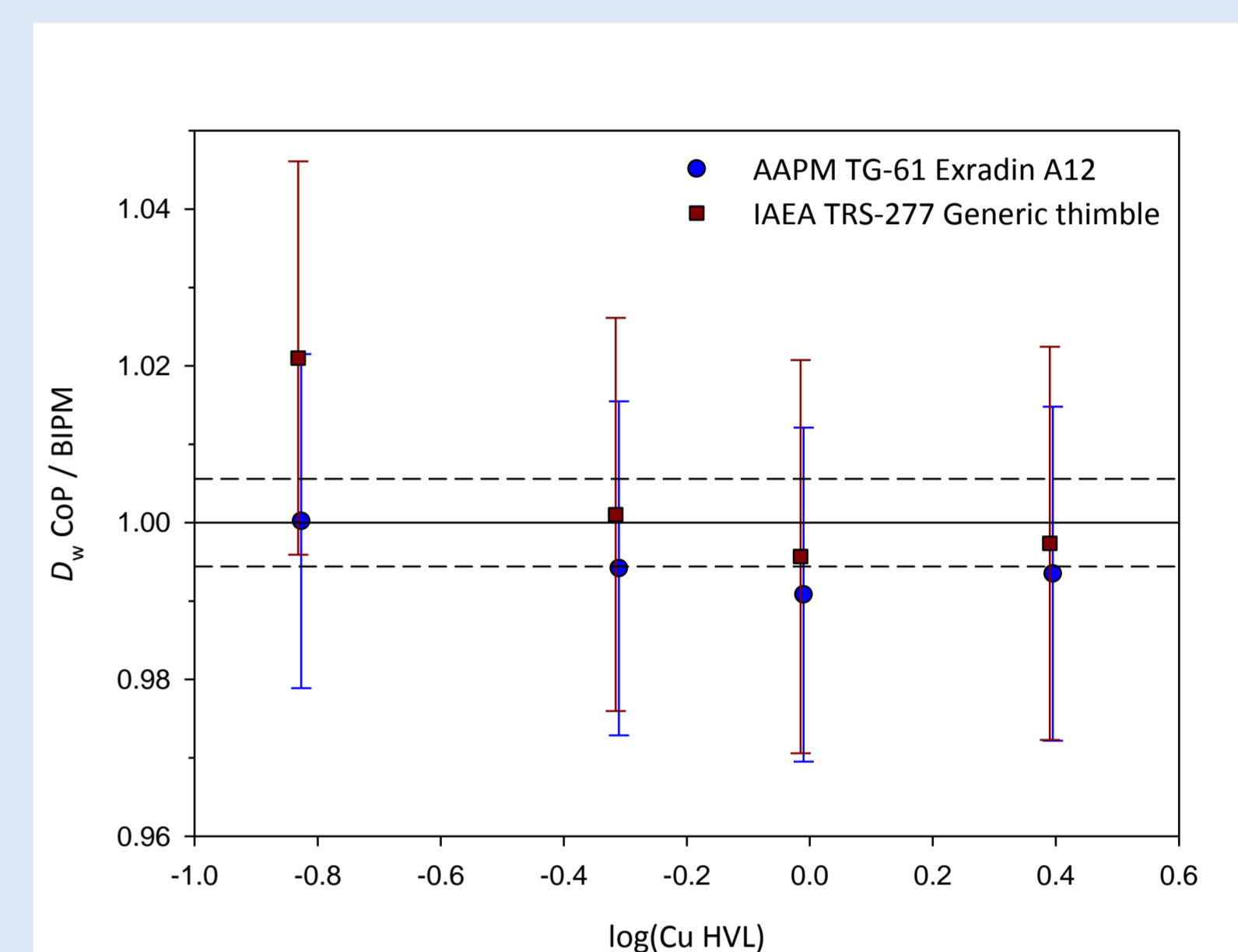
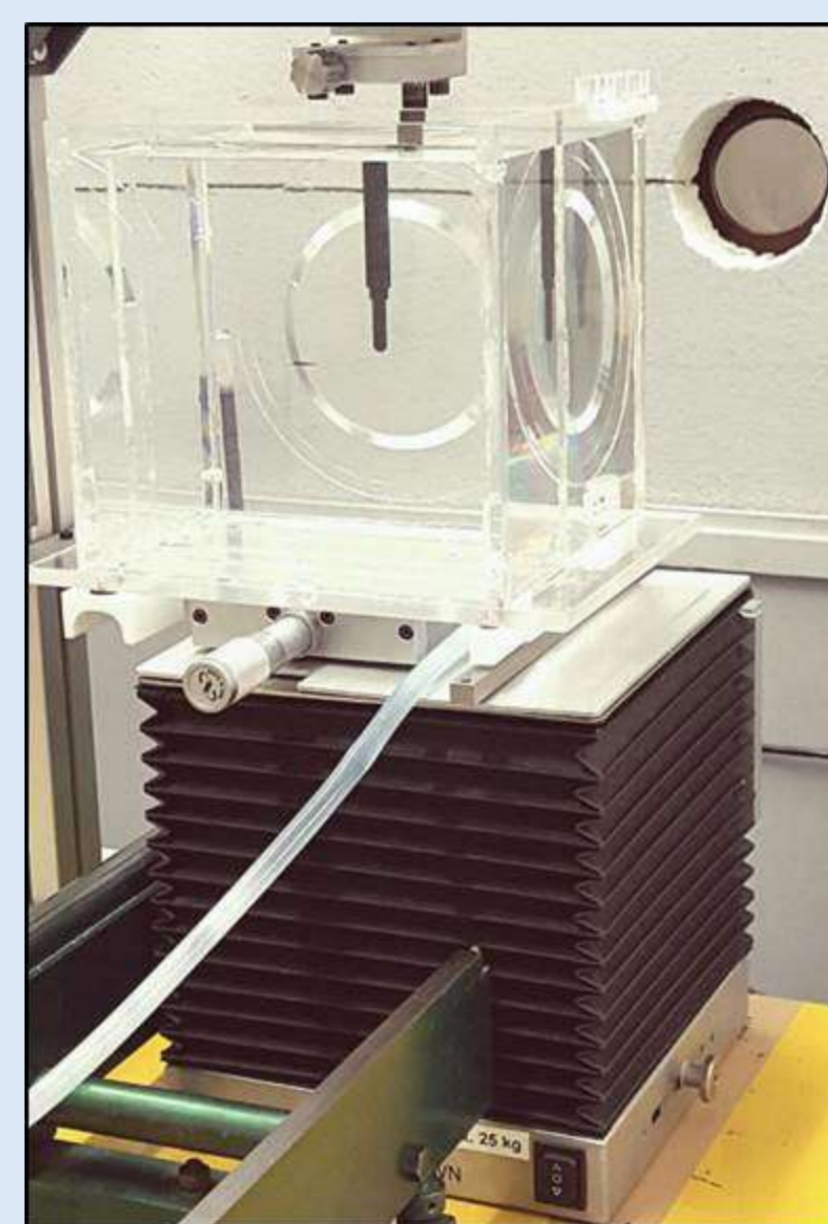
BIPM, CCRI

The BIPM comparison and calibration services cover standards for radiotherapy, brachytherapy, medical imaging and radiation protection. In total (including radioactivity), 78 comparisons were published. The BIPM has also contributed to IAEA, ICRU and ISO publications, and has welcomed secondees and visitors from 11 NMIs.

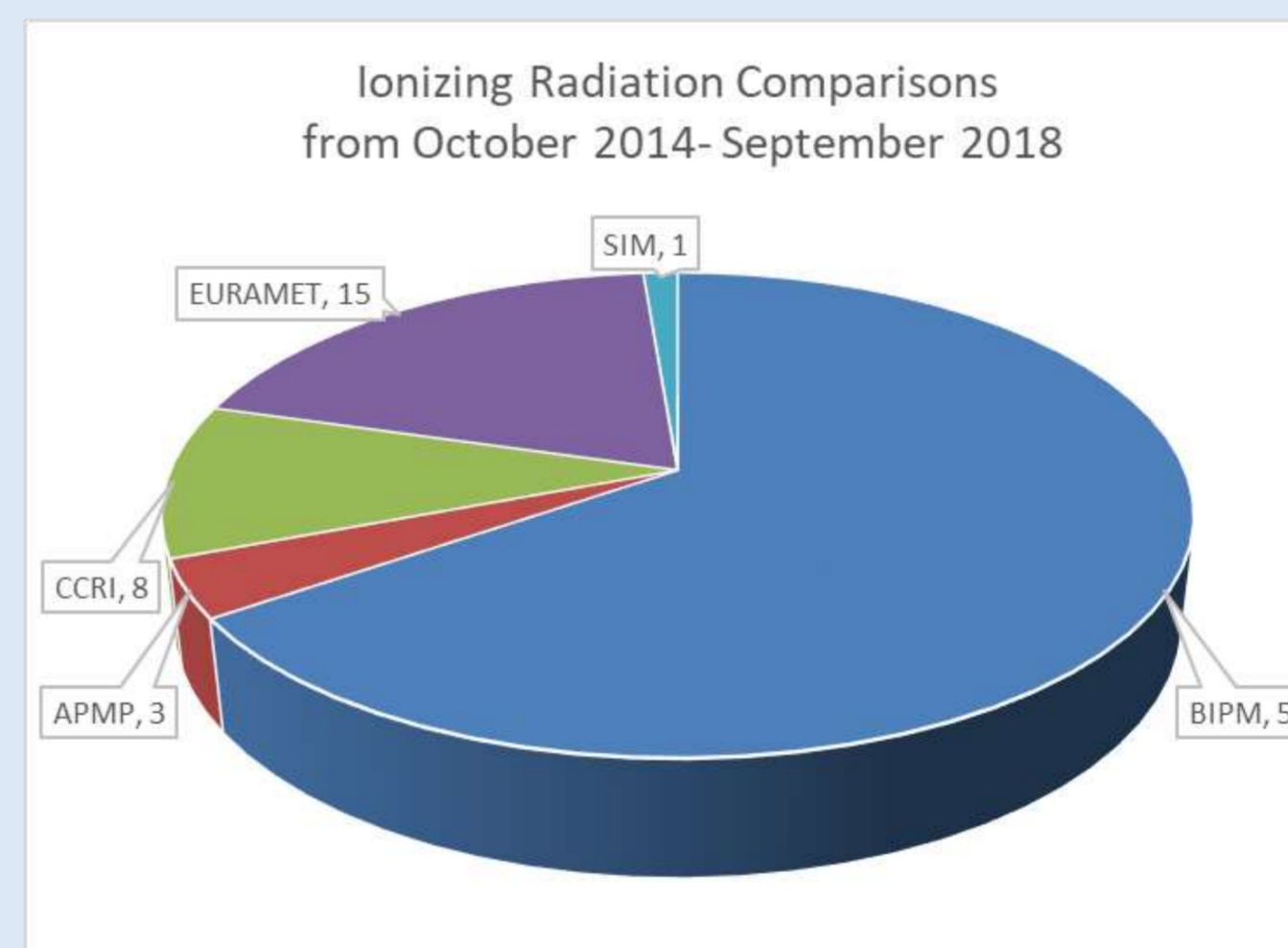


Photograph of the DOSEO facility reproduced with kind permission of the CEA

BIPM staff have characterized the high-energy photon beams at the DOSEO facility in Saclay. It is now being used for comparisons of standards for high-energy radiotherapy dosimetry.



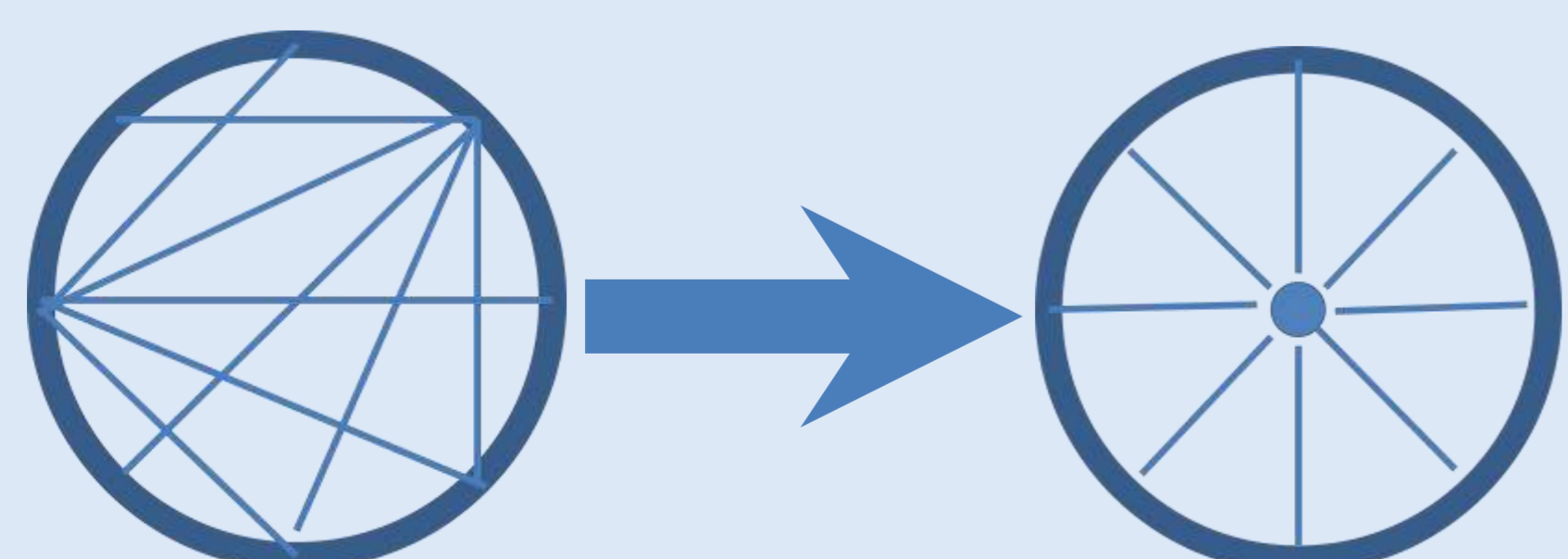
The BIPM has developed a novel method for medium-energy x-ray radiotherapy, that reduces uncertainties significantly.



60 % of the comparisons for ionizing radiation used the BIPM's services.



The BIPM provides established, on-demand, comparison and calibration services for dosimetry and radioactivity



The CCRI-BIPM 'hub and spoke' arrangement for comparisons reduces the need for NMIs to transport hazardous materials or delicate instruments to multiple destinations.