

# Thermal Design and Dimensional Drift



*Jens Flügge, Steffen Rudtsch, Rene Schödel,  
Hagen Lorenz, Michael Voigt*

*José Antonio Salgado, Kamélia Bouderbala*

*Nigel Jennett, Tony Maxwell*

*Arthur van der Nes, Dirk Voigt*

*Daniel Petit, Etienne Videcoq, Manuel Girault*

*Erik Beckert*

*Marc Schalles, Thomas Fröhlich*

[projects.npl.co.uk/T3D](http://projects.npl.co.uk/T3D)

**EMRP**  
European Metrology Research Programme  
► Programme of EURAMET



The EMRP is jointly funded by the EMRP participating countries within EURAMET and the European Union

**Tony Maxwell:**  
 Indentation at elevated temperatures

**Kamélia Bouderbala:**  
 Thermal design and control  
 Using reduced models

**Hagen Lorenz:**  
 Sample preparation for interferential measurements of long time stability and Thermal dilatation

**Steffen Rutsch:**  
 Fixed point cells using binary alloys

**Arthur van der Nes, Jens Flügge:**  
 Heterodyne interferometry for high resolution stability measurements

**Jens Flügge:**  
 Thermocouples at room temperature