EMN for Advanced Manufacturing: AGM 2024

EMN Advanced Manufacturing
Open Stakeholder Meeting
Agenda

23 October 2024
Free hybrid event hosted by PTB and online via MS Teams

Time	09:00 – 14:45 local time (CEST)
Place	PTB, Bundesallee 100, 38116 Braunschweig, Germany
Registration	Online/in person registration: https://ptb.de/cms/index.php?id=21260
Responsibility	PTB & the European Metrology Network for Advanced Manufacturing
Participants	EMN members and officials, EURAMET representatives, Stakeholders, Public

24. Oct:
Closed Stakeholder Council Meeting, 09:00-11:00

24. Oct:
Closed EMN Annual General Meeting, 13:00-15:00

Time	Topic	Speaker
08h30	Registration and soft start	
09h00	Welcome and introduction	Harald Bosse, PTB EMN Chair
09h10	News from EURAMET	Dolores del Campo, CEM EURAMET Chair
09h20	The international dimension of digitalization in metrology	Cornelia Denz, PTB President
09h50	Metrology requirements for the realisation of the Future Circular Collider	Hélène Mainaud Durand, CERN
10h20	**Coffee Break**	
10h50	Testing and production of Coradia Max, Alstom's winning combination of capacity and accessibility	Rüdiger Wendt, Alstom
11h20	Decarbonisation as Driver for the Transformation of Metrology Markets	Dietrich Imkamp, Zeiss
11h50	Precision Engineering for Sustainability	Liam Blunt, euspen President, University of Huddersfield
12h10	AI-MATTERS project: AI in Manufacturing, Test and Experimentation Facilities Network	Valentina Ivanova, CEA
12h30	**Lunch**	
13h30	Integrated Metrology for Advanced Manufacturing	Alkan Donmez, NIST
14h00	DG RTD activities on Advanced Manufacturing and Advanced Materials and link with the EMN Advanced Manufacturing	Edoardo Mascalchi, EC, DG R&I, RTD.E3
14h20	Manufacturing and Metrology, complementary aspects and challenges	Maurizio Gattiglio, ETP Manufuture
14h40	Concluding remarks and next steps	Harald Bosse, PTB EMN Chair
14h45	**End of meeting / Farewell coffee**	
15h30	**Optional: lab visits of PTB facilities**	
17h00	**End of lab visits**	

EMN for Advanced Manufacturing

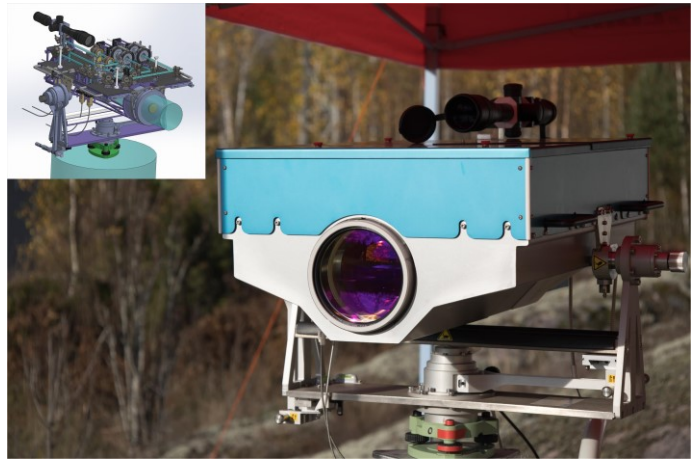
- Lab Tours, optional
  15:30-17:00
- 2 tours with focus on:
  1) Large scale metrology
  2) Dimensional CT and
     Scientific Instrumentation
- Group size:
  max. 10 persons per group



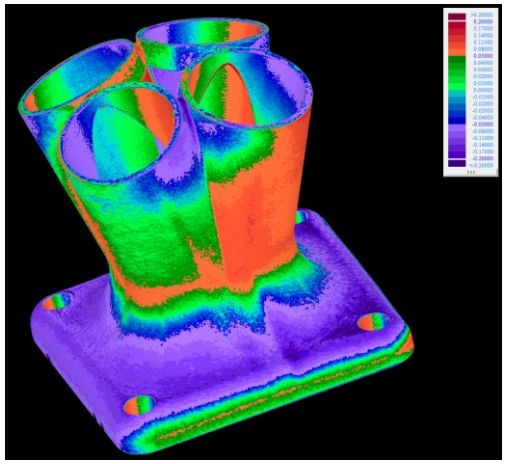
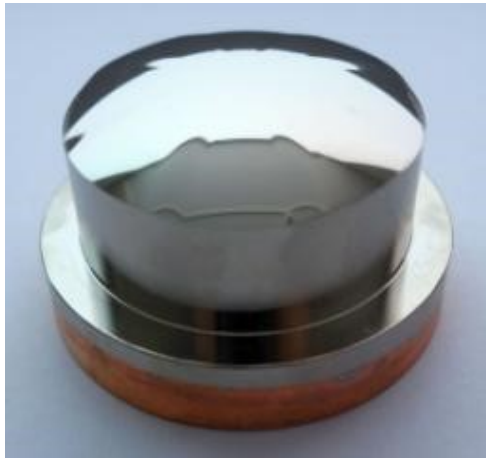
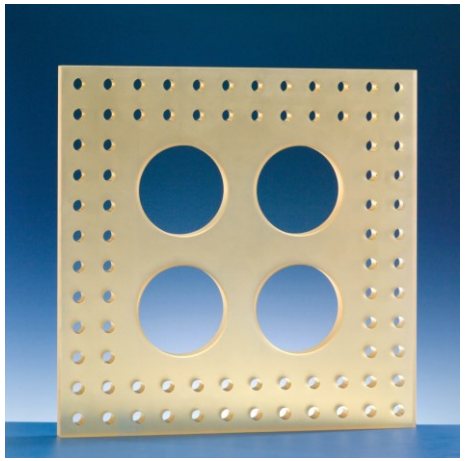
EMN for Advanced Manufacturing: Lab Tours

- **Lab tour 1: focus on large scale metrology**





- **Lab tour 2: focus on manufacturing for PTB tasks and on CT metrology**

PTB Precision Engineering Division: Organisation

5.1 Surface Metrology
U. Brand

Measurement Data Analysis in Prec. Engr.
D. Hüser-Espig

Tactile Probing
Z. Li

Hardness Metrology
F. Menelao

Layer Thicknes and Crystalline Standards
I. Busch

3D Roughness Metrology
S. Gao

5.2 Dimensional Nanometrology
J. Flügge

Length and Angle Graduations
R. Geckeler

Displacement Interferometry
H.-U. Danzebrink

3D Nanometrology
G. Dai

Electron Microscopy
T. Klein

Microsystems Technology
S. Bütefisch

5.3 Coordinate Metrology
K. Kniel

Geometrical Standards
M. Neugebauer

Coordinate Measuring Systems
D. Heißelmann

Gears and Threads
A. Przyklenk

Multisensor Coordinate Metrology
U. Neuschaefer-Rube

3D Calibrations
A. Wedmann

5.4 Interferometry on Material Measures
R. Schödel

Interferometry on Spheres
A. Nicolaus

Multiwavelength Interferometry for Geodetic Lengths
F. Pollinger

Interferometry on Gauge Blocks
G. Bartl

Conformity of Length Measuring Machines
I. Lohse

5.5 Scientific Instrumentation
F. Löffler

Design
F. Schmaljohann

Fabrication of Measuring Instruments
M. Klopp

Manufacturing of Components
J. Rother

Surface Technology
D. Hagedorn

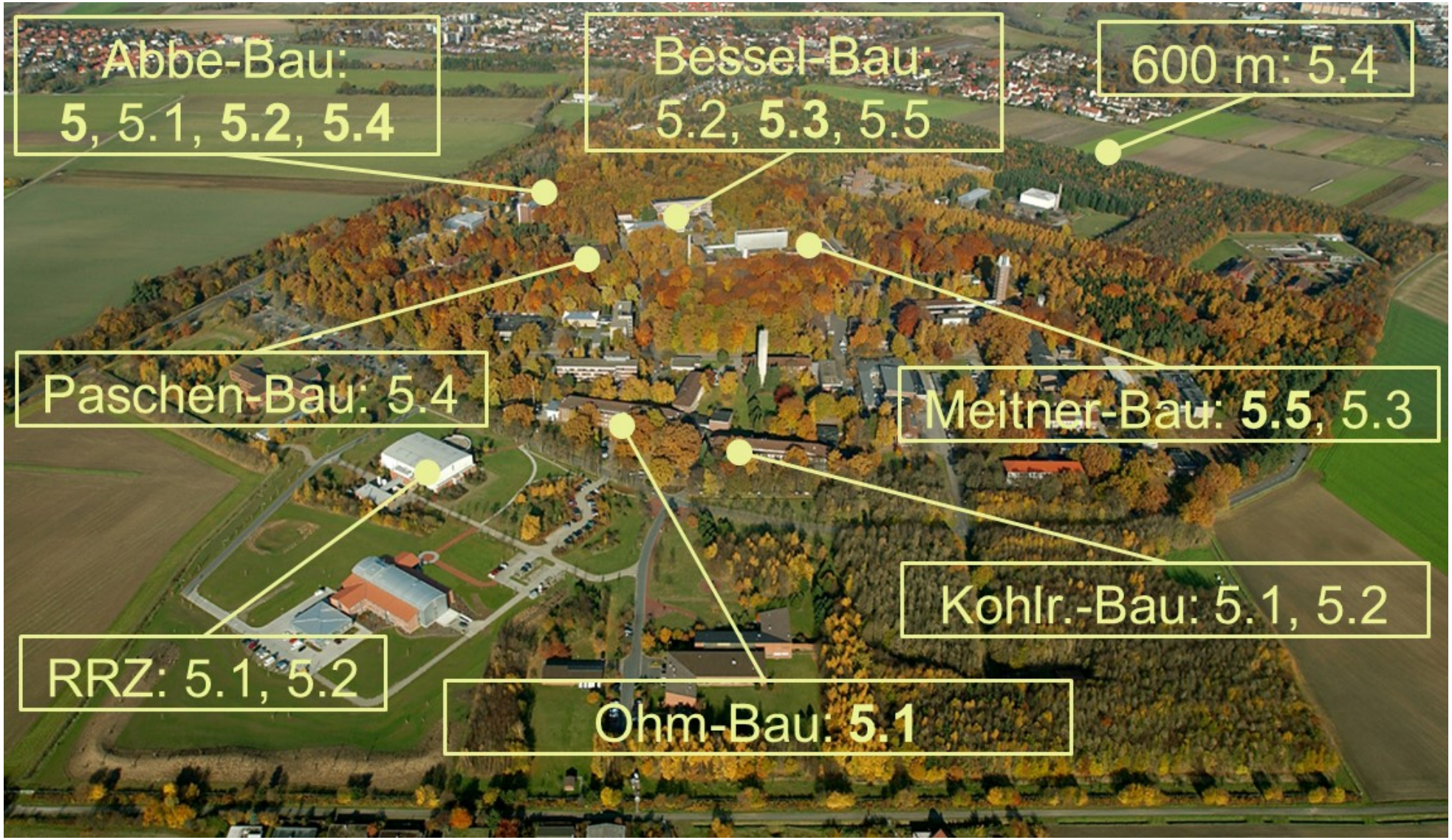
Training
V. Braumann

Manufacturing Technology
R. Meeß

Quality Mgmt: I. Busch

Safety-at-work expert: W. Ehrig

PTB Precision Engineering Division: on PTB site



Acknowledgement

Thanks to all colleagues who provided input for this presentation,
in particular those from JNP AdvManuNet and EMN for Advanced Manufacturing

=> *https://www.euramet.org/european-metrology-networks/advanced-manufacturing/*
=> ***advancemanu@euramet.org***

Thank you for your attention!



The project JNP 19NET01 AdvManuNet has received funding from the EMPIR programme co-financed by the Participating States and from the European Union's Horizon 2020 research and innovation programme.

EMPIR
EURAMET
The EMPIR initiative is co-funded by the European Union's Horizon 2020 research and innovation programme and the EMPIR Participating States