



european society for precision engineering and nanotechnology

Special Interest Group:  
**Precision Motion  
Systems & Control**  
12th-13th November 2024

Brabanthallen's-Hertogenbosch,  
The Netherlands

Precision motion systems and their control are key elements for precision engineering, both for manufacturing applications as well as for measuring instruments. From one-dimensional systems to complex multi-axis machines, components for linear and angular guides, actuation, measurement and control of motion are needed for precision positioning tasks. Increasing demands on the throughput of manufacturing systems and measuring instruments lead to the development of motion systems with higher dynamics and corresponding challenges for position control. As a consequence, the research on and the development of precision motion components, systems and their control is a focus area for industry, academia and the scientific instrumentation community. The intensive on-going work in this field brings together a further internationally co-ordinated meeting of leading expertise globally to an open forum for focused presentations and discussions on precision motion components, systems and control.

- Precision guide components and systems
- Linear and angular actuators
- Linear and angular position measurement systems
- Motion controllers and drive amplifier
- New approaches in control algorithms
- Multi-axis positioning systems
- High dynamic positioning systems
- Vibration isolation and active damping systems
- Modelling and analysis of high performance mechatronics designs
- System identification, testing and trouble-shooting
- Robotics
- Kinematic motion errors characterization and modelling
- Mechatronics in scientific instrumentation

### Key dates

<b>23<sup>rd</sup> Aug 2024</b>	Online abstract submission deadline
<b>20<sup>th</sup> Sep 2024</b>	Notification of presentation award to authors (oral/poster)
<b>23<sup>rd</sup> Sep 2024</b>	Programme available online/ Registration opens

\*Topics are nominal at time of printing.  
Please check our website for up-to-date information.

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