



VIRTUAL CONFERENCE

Special Interest Group:
**Precision Motion
Systems & Control**
17th-18th November 2020



Dear Delegates,

We very much look forward to welcoming you to euspen's Special Interest Group meeting on Precision Motion Systems & Control, which will take place from Tuesday 17th – Wednesday 18th November 2020.

To help you with your planning, we have provided a summary of key information for the meeting.

Meeting Access

euspen's Precision Motion Systems & Control tutorial will take place via [Microsoft Teams](#).

euspen's Precision Motion Systems & Control meeting will take place via [Zoom](#).

Access links for both the tutorial and meeting will be sent out via email w/c 9th November 2020 to those delegates that have registered. It is recommended that you become familiar with both tools and download if necessary.

We kindly ask that during the meeting delegates place themselves on mute to avoid any background noise whilst presenters are presenting.

Please note that this virtual meeting will be recorded to allow to delegates to watch post event.

Programme

The meeting programme is available on the [programme](#) webpage and a summary of the day's events are detailed below. Please note that all times are shown in Central European Time (CET).

Date	Programme Summary	Time (CET)
Tuesday 17th November	Tutorial: Design concepts for sub-micrometer positioning	09:00 –12:30
Tuesday 17th November	SIG Meeting: Day 1 <ul style="list-style-type: none">- Keynote & Oral Presentations- Coffee & Debate	13:30 –18:00
Wednesday 18th November	SIG Meeting: Day 2 <ul style="list-style-type: none">- Keynote, SOTA & Oral Presentations- Poster Session- Coffee & Debate	09:00 – 14:55

Tutorial



Huub Janssen, from JPE, Netherlands will give a live, interactive tutorial on **Design concepts for sub-micrometer positioning**.

This tutorial is designed for mechanical designers entering the field of precision engineering where positioning down to nanometric levels is required. The course will give some theoretical background, but mainly focuses on practical implementation of various design solutions, which can be used in this field of engineering.

Summary of tutorial course content:

Principles for accuracy, play, stiffness, friction.

- Definition of positioning terminology: Accuracy, repeatability, resolution, stability.
- Discussion of practical case in order to determine items compromising position accuracy.

Design solutions and mechatronic context.

- Compliant mechanisms, flexure design.
- Use leaf springs instead of roller bearings. Advantages / disadvantages.
- Thin plate design (torsional stiffness).
- Example: Mechatronic positioning challenge.

The tutorial will take place via [Microsoft Teams](#). **Please make sure that you have downloaded the Microsoft Teams application in advance of the meeting.**

The tutorial will be fully interactive so please have your webcam/video switched **on** during the tutorial.

Keynotes



Tuesday 17th November
13:40 – 14:10

Prof. Hans Butler
ASML, The Netherlands
Mechatronic challenges in optical lithography



Wednesday 18th November
13:40 – 09:30

Prof. Dr.-Ing habil. Eberhard Manske
TU Ilmenau, Germany
High precision mechatronic approaches for advanced nanopositioning and nanomeasuring technologies

SOTA



Wednesday 18th November
12:50 – 13:15

Manuel Ferre
ETS Ingenieros Industriales UPM, Spain
Precision and proprioception in telerobotics

Oral & Poster Presentations

All oral and poster presentations will be presented **live** via Zoom and a timetable detailing all presentations can be found on the meeting [programme](#).

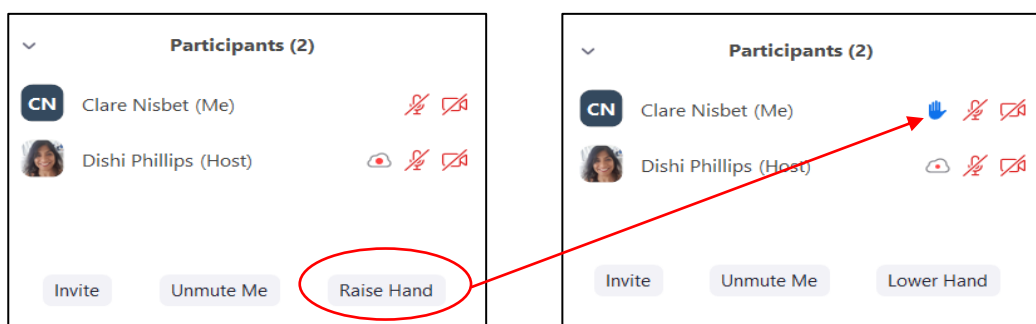
Question & Answers

Throughout the meeting, delegates will have the opportunity to ask oral and poster presenter's questions. Session chairs will aim take as many questions as they can in the allotted time.

At the end of each oral session, there will be a coffee, debate and discussion session where oral presenters will answer any questions.

Poster presenters will answer questions during the poster session after the last poster presenter has presented.

To ask a question delegates should select the **'raise hand'** option on Zoom during or directly after the presentation to indicate to the session chair that a question would like to be asked. Please do not type questions in the chat functionality.



If selected by the session chair to ask a question the delegate should unmute their microphone and proceed to ask their question.

Delegates should place themselves back on mute after their question has been answered by the presenter.

Coffee & Debate

The coffee and debate sessions are an opportunity for delegates to enter into open discussion and will be facilitated by the session chair.

We encourage delegates to bring along a cup of tea or coffee and join these sessions to openly discuss the session presentations, state-of-the-art practice, and key research and development in the area of Precision Motion Systems & Control.

On behalf of the **euspen** team, thank you for your continued support and for allowing us to remain connected. We look forward to welcoming you virtually to the Precision Motion Systems & Control meeting.