

Room 3

Keynote session 3 (Machine learning/Systems)

KS3-1 Keynote Speaker: Prof. Robert Gao

Deformation prediction in English wheeling through physics-informed machine learning (GS15-12)

Clayton Cooper, Jianjing Zhang and Robert X. Gao

KS3-2 Keynote Speaker: Dr. Daniel Meyer

Precision in Microtexturing: A Machine Learning Approach to Optimize Surface Parameters and Milling Techniques for Enhanced Topography (GS15-07)

Pooria A. Farahani, Oltmann Riemer and Daniel Meyer

KS3-3 Keynote Speaker: Prof. Jean-Marc Linares

How can nature help us find mechanical solutions: Sustainable, resilient and frugal (GS02-06)

Jean-Marc Linares

Feature session 3 (Machine learning/Systems)

FS3-1 Feature Speaker: Prof. Burak Sencer

Accurate prediction of 5-axis machining cycle times with machine learning (GS15-02)

Shih-Hsuan Chien, Shingo Tajima and Burak Sencer

FS3-2 Feature Speaker: Prof. Peng Wang

Efficient and Generalizable Machine Learning for Inline Defect Detection in Battery Laser Welding (GS15-08)

Xijia Zhao, Joseph Kershaw, Masoud Pour, Junjie Ma, Hassan Ghassemi-Armaki, Blair Calson and Peng Wang

FS3-3 Feature Speaker: Prof. Xi Vincent Wang

Design of an RFID-based part identification approach: a case study in an automotive manufacturing plant (OS01-02)

Xi Vincent Wang and Felix Buchner

Feature session 8 (Optical metrology)

FS8-1 Feature Speaker: Prof. Koji Iwamura

Verification of Effectiveness of Demand Forecast for Plant Factories (OS03-03)

Koji Iwamura, Nobuhiro Sugimura, Yasuhiro Kinoshita and Junichi Yamaguchi

FS8-2 Feature Speaker: Dr. Ralf D. Geckeler

State of the art and novel approaches in angle metrology at the Physikalisch-Technische Bundesanstalt (GS11-06)

Ralf D. Geckeler, Matthias Schumann, Andreas Just and Michael Krause

FS8-3 Feature Speaker: Prof. Feng Gao

Error analysis for near optical coaxial phase measuring deflectometry with refraction error model (GS11-05)

Yanling Li, Feng Gao, Yongjia Xu, Zonghua Zhang and Xiangqian Jiang

FS8-4 Feature Speaker: Prof. Ryo Sato

Second harmonic confocal probe with a mode-locked femtosecond laser (GS11-03)

Ryo Sato, Hiraku Matsukuma and Wei Gao