Robotics –Application for Stress Analysis using Neutron Diffraction

Monday, May 27, 2024 4:55 PM (25 minutes)

The original robot setup at the neutron diffractometer STRESS-SPEC has been upgraded to a high accuracy positioning/metrology system. I will give a short introduction on the complete measurement process chain for the new robot environment. To achieve a spatial accuracy of 50 μm or better during measurement of the strain tensor, the sample position is tracked by a camera system and actively corrected. A brief overview of additional sample environment for the robot will also be given.

Primary author: HOFMANN, Michael

Co-authors: WANG, Lijiu; Mr LANDESBERGER, Martin (TUM); KEDILIOGLU, Oguz (Friedrich-Alexander Universität Erlangen); Dr GAN, Weimin (Helmholtz-Zentrum Hereon)

Presenter: HOFMANN, Michael

Session Classification: Presentations