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## Mechanical Design in Neutron Instrumentation

*Tuesday, 15 May 2018 08:30 (30 minutes)*

The Forschungszentrum Jülich (FZJ) has a long history in neutron scattering. Today the Jülich Centre for Neutron Science (JCNS) is developing and operating several instruments at different outstations. The most important is the FRM II in Munich.

The talk will start with an overview on the engineering and manufacturing infrastructure at the FZJ. The scientific institute JCNS is strongly supported by the engineering institute ZEA-1 and JCNS's in-house workshop using a broad range of engineering and manufacturing tools.

The two most recent instruments developed for FRM II are the thermal time-of-flight spectrometer TOPAS and the time-of-flight powder diffractometer POWTEX. The mechanical design of both instruments will be presented. After a brief overview, some specific requirements will be described followed by the detailed presentation of chosen solutions in the design, prototyping and manufacturing.

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