CREMLIN workshop: Engineering for advanced neutron instrumentation and sample environment



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Type: Invited talk (+ poster)

PIK reactor neutron guide system

Tuesday, 15 May 2018 10:30 (30 minutes)

The construction of the high-flux PIK reactor is coming to the final stage. Its neutron guide system design is almost frozen and will be presented in details during the talk. The reasons behind design choices will also be discussed.

The guide system is fed by 2 beam tubes: one equipped with cold neutron sources and the other is thermal one. In total 13 cold and 5 thermal instrument will use neutron beams provided by the neutron optics. All guides were optimized with respect to the instrument beam requirements and many geometrical constraints. Some special features like a special guide tilting the beam will be discussed as well as future opportunities for further system expansion.

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