Neutron scattering in the Czech Republic: facilities, techniques, and science

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Neutron scattering is a powerful technique for probing the microscopic properties of materials. This lecture will provide an overview of neutron sources in the Czech Republic, the country's involvement in international neutron facilities, and key neutron scattering methods, including powder and single-crystal diffraction and inelastic neutron scattering. Particular attention will be given to the advantages of neutron scattering in studying magnetic structures and excitations in condensed matter, demonstrating its essential role in modern materials research.