

Take Off of the J-PARC High-Pressure Neutron Diffractometer PLANET

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The high-pressure neutron diffractometer PLANET is the new spectrometer dedicated for high-pressure experiments, which is now being constructed in MLF at J-PARC. The main purpose is to investigate the effect of the water on the Earth's dynamics with the help of the neutron. One of the most characteristic features is the huge 6ram 6axes press with the maximum centric load to 3000 tonf, which enables us to investigate the structure of crystals, liquids and amorphous solids under high-pressure and high-temperature conditions of 20GPa and 2000K. We have installed the high-pressure press, ATSUHIME, and the construction of the spectrometer was almost finished. After the last big earthquake, we successfully received the neutron beam again in the last Janually. We introduce the state of the comissioning and the future plan.

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