

The Science Capability Of The Low Temperature Microgravity Physics Facility

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The Low Temperature Microgravity Physics Facility (LTMPF) is a multiple user and multiple-flight NASA facility that will provide a low temperature environment for about 4.5 months on board the International Space Station (ISS). The Jet Propulsion Laboratory is developing the Facility for its initial flight in late 2005. The LTMPF will be attached to the Japanese Experiment Module (KIBO) Exposed Facility of the ISS. The LTMPF will provide a reusable platform to enable state of the art experiments requiring both low temperatures and microgravity conditions. During each mission, two distinct primary experiments will be accommodated, as well as secondary experiments that can utilize the as built hardware. The scientific capabilities of the Facility will be presented, along with a description of the six science investigations selected to fly on the first two missions.

Section: Applications, materials and techniques

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