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# An overview of the Fundamental Physics in Space Research Program

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NASA's microgravity fundamental physics program has used the Space Shuttle to perform high resolutions experiments in space. As we come to the end of the Shuttle era, we will begin to perform research aboard the ISS. A large stable of ground based experiments have been selected from NASA Research Announcements in a variety of disciplines. These investigations will form the backbone from which to select future flight candidates. Research in Laser Cooling and Atomic Physics will enable us to operate highly precise clocks in space and study atom interferometers and Bose-Einstein Condensates in space. Low temperature physics experiments will use a liquid helium facility for month long studies of many particle phenomena under well-controlled conditions. This facility will also support experiments in gravitational physics. Researchers in biological physics will be offered an opportunity to develop future experiments that can benefit from space experimentation. An overview of the future research directions and the benefits to the community of performing research aboard the ISS will be presented.

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