

Physics Opportunities for Meson Beams

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During the past several decades a large quantity of high-quality mesonic photo- and electroproduction data of have been measured at electromagnetic facilities worldwide. By contrast, meson-beam data for these same final states are mostly outdated, largely of poorer quality, or even non-existent. Thus existing meson beam results provide inadequate input to interpret, analyze, and exploit the potential of the new electromagnetic data. To achieve full benefit of these high-precision electromagnetic data, new high-statistics data from measurements with meson beams, with good angle and energy coverage for a wide range of reactions, are critically needed to advance our knowledge in baryon and meson spectroscopy and other related areas of hadron physics. To address this situation, a state-of-the-art meson-beam facility is needed. This presentation summarizes unresolved issues in hadron physics and outlines the opportunities and advances that are possible with such a facility.

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