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## SoLID program at JLab

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An all new detector, Solenoidal Large Intensity Device (SoLID), has been proposed for the Jefferson Lab 12 GeV era. A wide range of experiments were approved for SoLID. They include parity violation in deep inelastic scattering (PVDIS) to test the Standard Model at low energies, semi-inclusive deep inelastic scattering (SIDIS) to study the parton Transverse Momentum Distributions (TMD), Timelike Compton Scattering (TCS) to study the Generalized Parton Distributions (GPD), and  $J/\psi$  production near threshold to study the QCD gluonic force and proton mass. SoLID will fully utilize the great physics potential of the JLab 12-GeV energy upgrade by combining high luminosities and large acceptance and I will give a brief introduction to the SoLID physics programs. This work is supported in part by U.S. Department of Energy under contract number DE-FG02-03ER41231.

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