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Exploring the Energy Frontier; Looking Beyond LHC Discoveries

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The Large Hadron Collider (LHC) at CERN will soon deliver long awaited data at the Terascale (TeV energy scale). Discoveries are expected to illuminate the nature of electroweak symmetry breaking and the origin of mass, and could reveal other new phenomena such as dark matter particles, extra spatial dimensions, and advances toward grand unification. The LHC data will guide the direction of future exploration, motivating the next facilities. If the energy scale of new physics is within its reach, as widely expected, the International Linear Collider (ILC), with its characteristic precision, should be the next machine for particle physics. I will review the physics opportunity of the ILC, the world-wide effort to realize it, and the detector R&D program to develop the needed new capabilities for the precision measurements. Should Nature be unyielding at the LHC, higher energy lepton colliders might provide the needed complementarity. This will also be discussed.