

Abstract Submitted  
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**LHC Physics Potential vs. Energy**<sup>1</sup> CHRIS QUIGG, Fermilab —  
Parton luminosities are convenient for estimating how the physics potential of Large Hadron Collider experiments depends on the energy of the proton beams. I present parton luminosities and ratios of parton luminosities for  $gg$ ,  $u\bar{d}$ , and  $qq$  interactions over the energy range relevant to the Large Hadron Collider, along with example analyses for specific processes.

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