

Large Hadron Collider (10 points)

Part A. LHC accelerator (6 points)

A.1 (0.7 pt)

$v =$

A.2 (0.8 pt)

approximation: $\Delta =$

numeric: $\Delta =$

A.3 (1.0 pt)

formula: $B =$

numeric: $B =$

A.4 (1.0 pt)

$P_{\text{rad}} \propto$

A.5 (1.0 pt)

$P_{\text{tot}} =$

A.6 (1.5 pt)

$T =$

Part B. Particle Identification (4 points)

B.1 (0.8 pt)

$m =$

B.2 (0.7 pt)

$l =$

B.3 (1.7 pt)

$m =$

B.4 (0.8 pt)

Particle	Measured mass; mass unit [] :	Identified as:
A		
B		
C		
D		