# MASSACHUSETTS INSTITUTE OF TECHNOLOGY Department of Physics

Physics 8.01L Fall 2005

# **Problem Set 7: Energy and Momentum**

# Due Thursday, November 10 NOTE EARLY DUE DATE! Turn in during class at 10am or by 6:30pm.

Please write your name, recitation number, table number, and tutor name on the top right corner of the first page of your homework solutions. Please place your solutions in the Problem Set Solution hand-in bin at the entrance of the classroom.

## Reading:

Young & Freedman Chapter 7 (Sections 7.2-7.5) & Chapter 8 (Sections 8.1-8.4)

### **Problem 1 Springy Incline**

Young & Freedman Problem 7.73 (Page 280)

#### **Problem 2 Working Against a Spring**

Young & Freedman Problem 7.75 (Page 280)

#### **Problem 3 Strange Potential**

Young & Freedman Problem 7.86 (Page 281)

#### **Problem 4 Hockey Momentum**

Young & Freedman Problem 8.17 (Page 318)

## Problem 5 Spring Momentum & Energy

Young & Freedman Problem 8.19 (Page 318)

#### Problem 6 Bullet Momentum & Energy

Young & Freedman Problem 8.77 (Page 322)