

## **College Physics Summer Assignment for GSIP Juniors 2020/21**

The summer assignment consists of four separate assignments, the so-called case studies, as listed below. You will solve each of the four cases separately. You will staple them together and bring the entire summer assignment to class on Friday, August 28.

### **Case Study One: Escape from Colditz Castle**

(1) Access the assignment through the following URL:

[http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case\\_id=951&id=951](http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=951&id=951)

(2) Read the overview of the assignment.

(3) Download the case and do your best to solve it. (10 pts.)

### **Case Study Two: Applying Newton's Third Law of Motion in the Graviton Ride**

(1) Access the assignment through the following URL:

[http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case\\_id=646&id=646](http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=646&id=646)

(2) Read the overview of the assignment.

(3) Download the case and do your best to solve it. (10 pts.)

### **Case Study Three: The Cheerleader and the Football Player**

(1) Access the assignment through the following URL:

[http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case\\_id=396&id=396](http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=396&id=396)

(2) Read the overview of the assignment.

(3) Download the case and do your best to solve it. (10 pts.)

### **Case Study Four: The Itsy-Bitsy Spider: An Analysis of Spider Locomotion**

(1) Access the assignment through the following URL:

[http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case\\_id=790&id=790](http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=790&id=790)

(2) Read the overview of the assignment.

(3) Download the case and do your best to solve it. (10 pts.)

Good luck!