

**CS 791v: Topics: Parallel Computing**

**Fall 2011**

**Programming Assignment 1**

**Thrust: Sum of Squares**

**Assigned Date**

9/6/2011

**Due Date**

9/13/2011

**Overview**

For this project you are going to write a thrust program. It is to read in an array and then on an element by element basis square each element and sum them all. You will do this two different ways:

* Method 1: Use transform() and reduce() Separately
* Method 2: Use transform\_reduce()

Have a command line option to either read in the file of numbers or make a call to generate() [example in the hellothrust in the notes from last week.] to have thrust generate the numbers from 1 to n for you (this allows easy error checking)

**Project Requirements**

* A compiled and running CUDA program which times each method and prints out the times so they can be compared

**Recommendations**

* Don’t time the file I/O

**Deliverables**

* Bring code and Output to class for discussion.