Université de Pau et des Pays de l'Adour Département de Mathématiques 2020-2021

> M2-BigData : GPGPU Chapter 13 – Exercice 1

## **Objectives**

Write a first simple OpenACC code.

## Instructions

- 1. Write a CPU version of the vectorAdd code from Chapter 3.
- 2. Write a second version using explicit data movement directives

## Questions

1. Use the profiler to compare the 3 versions of vector add: CUDA, OpenACC with generated data transfers and OpenACC explicit data management. Are the execution time of the whole algorithm (transfers + computations) are almost the same? Explain?