Cosmic rays modulation in heliosphere models on GPU

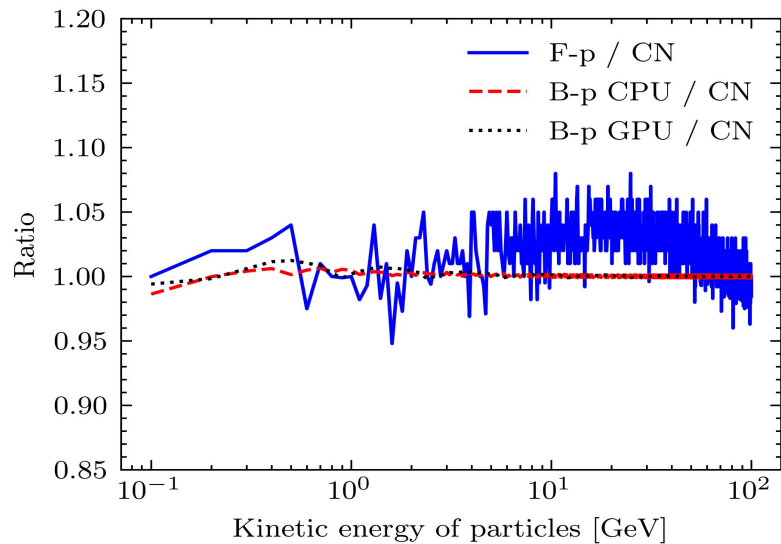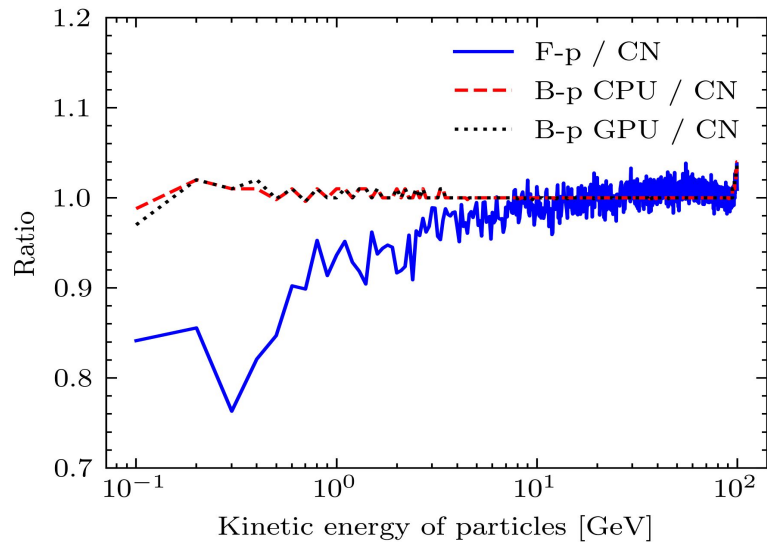Michal Solanik, Pavol Bobík, Ján Genči

Introduction

- Simulations of cosmic rays modulation in heliosphere is demanding on resources
- GPU - advantage of parallel architecture

Acceleration

- F-p model was accelerated 8-times against reference CPU system
- B-p model was accelerated 86x to 183x based on input parameters for simulation

Accuracy

Thank you for attention