

## Bonus Problem (28Nov22)

Name: your name

Rubric for each assignment:

Context	Points
Precision of the answer	80%
Answer Markdown readability	10%
Code readability	10%

Guidance:

- This is an individual homework.
- Upload your answers in the Blackboard submission portal as:  
lastname-firstname-homework-xx.pdf or lastname-firstname-homework-xx.ipynb

### Table of Problems

- **Bonus Problem (100 pts)** Fraction of neutron slowing down.

### Bonus Problem (20 pts)

Neutrons scatter elastically at 1 MeV. After one scattering collision, calculate the fraction of the neutrons that will have energies of less than 0.5 MeV when they scatter from the following materials:

**1)**(5 pts) Hydrogen.

Answer:

**2)**(5 pts) Deuterium.

Answer:

**3)**(5 pts)  $^{12}\text{C}$ .

Answer:

**4)**(5 pts)  $^{238}\text{U}$ .

Answer: