

Dr Salwa Alsaleh
Dept. of Physics and Astronomey
College of Science- King Saud University
Riyadh 11451- Saudi Arabia
☎ +966 (11) 80 52458
✉ salwams@ksu.edu.sa
🏠 fac.ksu.edu.sa/salwams

Phys 343 project

Thermodynamics of nuclear reactors

Nuclear power has become an essential source of energy, and holds great promises in the future. One of the key elements in nuclear engineering is to manage the heat cycle inside the nuclear reactor.

In this project, you shall learn about the structure of nuclear reactors and the types of heat cycles inside of it. You shall summarise your understanding in the following points.

1. What is a nuclear reactor ?
2. Types of nuclear reactors
3. Thermodynamic cycles of nuclear reactors.

You should include the references in your project

- Rageb, M. (2016). Nuclear reactor concepts and thermodynamic cycles..
- Zohuri, B., & McDaniel, P. (2015). Thermodynamics in nuclear power plant systems. Springer.
- Thermodynamcis - Nuclear Power
<http://www.nuclear-power.net/nuclear-engineering/thermodynamics/>

Best Regards,

Dr Salwa Alsaleh