Download Nuclear Reactor Theory

A nuclear reactor, formerly known as an atomic pile, is a device used to initiate and control a self-sustained nuclear chain reaction.Nuclear reactors are used at nuclear power plants for electricity generation and in propulsion of ships.Heat from nuclear fission is passed to a working fluid (water or gas), which in turn runs through steam turbines. ...Nuclear reactor physics is the branch of science that deals with the study and application of chain reaction to induce a controlled rate of fission in a nuclear reactor for the production of energy. Most nuclear reactors use a chain reaction to induce a controlled rate of nuclear fission in fissile material, releasing both energy and free neutrons.A reactor consists of an assembly of nuclear ...Nuclear fission: Nuclear fission, subdivision of a heavy atomic nucleus, such as that of uranium or plutonium, into two fragments of roughly equal mass. The process is accompanied by the release of a large amount of energy. Nuclear fission may take place spontaneously or may be induced by the excitation of the nucleus.Integrated Publishing, Inc. Google +