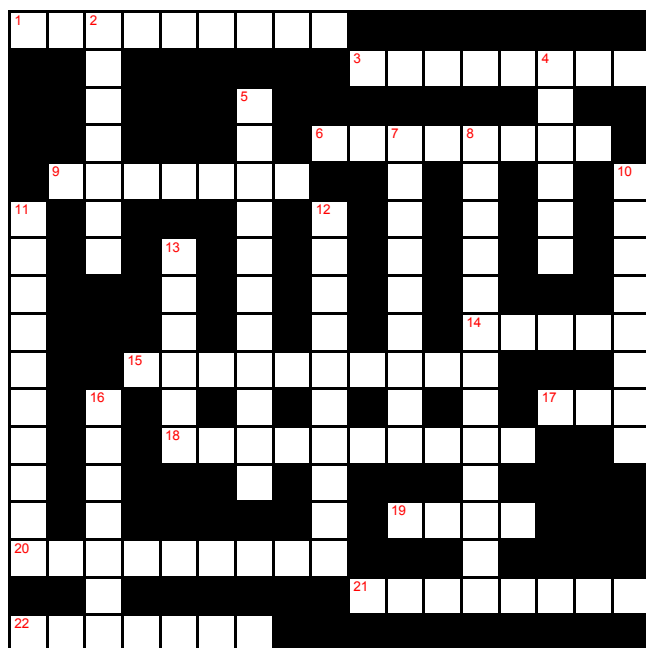


# Nuclear\_Physics\_17x17\_2008-10-19

B.B. Huria



## Across

- 1 A radioactive transuranic element that is similar to uranium; it is usually synthesized in nuclear reactors. (9)
- 3 An especially luminous meteor (sometimes exploding). (8)
- 6 An elementary particle with negative charge. (8)
- 9 A nuclear reaction in which a massive nucleus splits into smaller nuclei with the simultaneous release of energy. (7)
- 14 The (usually elliptical) path described by one celestial body in its revolution about another. (5)
- 15 A nuclear reaction in which many particles are ejected from an atomic nucleus by incident particles of sufficiently high energy. (10)
- 17 A state of open, armed, often prolonged conflict

carried on between nations, states, or parties. (3)

- 18 The study of the behaviour and characteristics of nucleons or atomic nuclei. Development of instruments for use in nuclear research. (10)
- 19 Fissionable material used in a nuclear reactor. (4)
- 20 The science of the composition, structure, properties, and reactions of matter, especially of atomic and molecular systems. (9)
- 21 The simplest and lightest and most abundant element in the universe. (8)
- 22 Capable of undergoing nuclear fission. (7)

## Down

- 2 A heavy silvery-white metallic element, radioactive and toxic, easily oxidized, and having 14 known isotopes of which U 238 is the most abundant in nature. (7)
- 4 Of or employing nuclear energy. (6)
- 5 An extremely precise timekeeping device regulated in correspondence with a characteristic invariant frequency of an atomic or molecular system. (6,5)
- 7 A release of mechanical, chemical, or nuclear energy in a sudden and often violent manner with the generation of high temperature and usually with the release of gases. (9)
- 8 Of, relating to, or derived from the fusion of atomic nuclei at high temperatures: \_\_\_\_

reactions. (13)

- 10 To add nonfissionable matter to (fissionable material) so as to prevent use in an atomic weapon. (8)
- 11 Having two or more atomic rings in a molecule. (10)
- 12 The radioactive decay of an atomic nucleus by emission of an alpha particle. (5,5)
- 13 An instrument of attack. (6)
- 16 The positively charged dense center of an atom. (7)