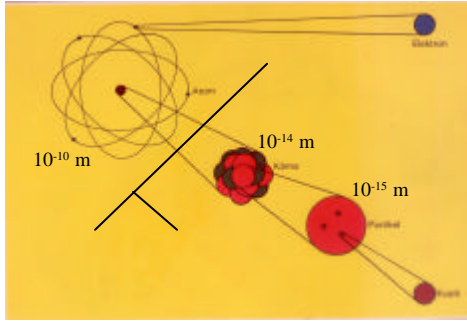
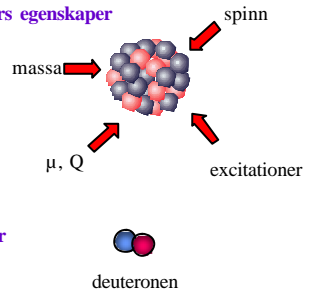


Subatomär fysik

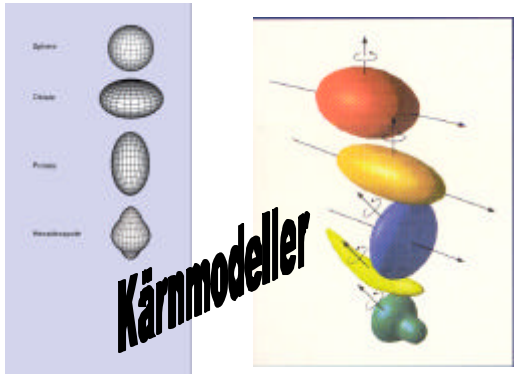


Kursens innehåll

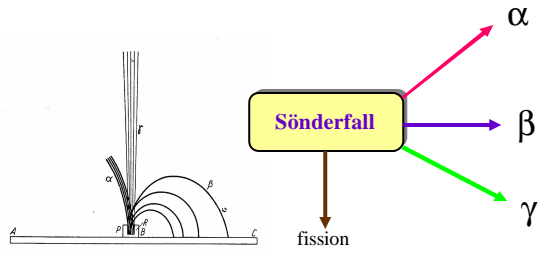
Atomkärnors egenskaper



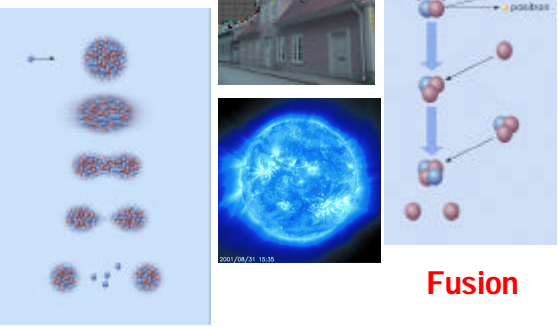
Kärmodeller



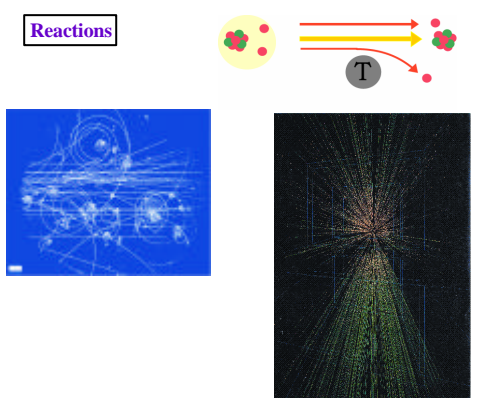
Radioaktivitet

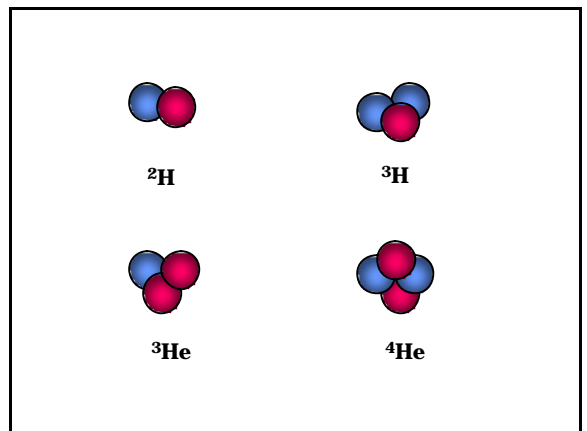
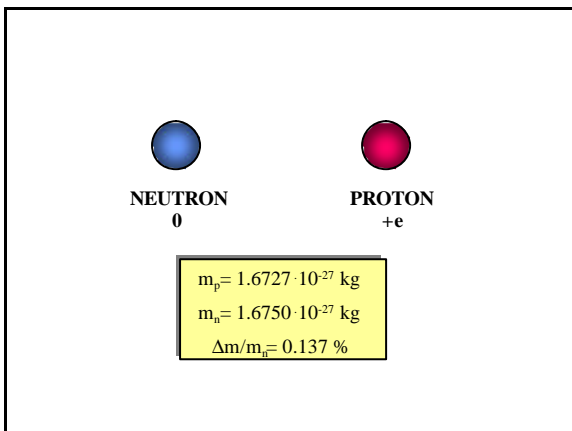
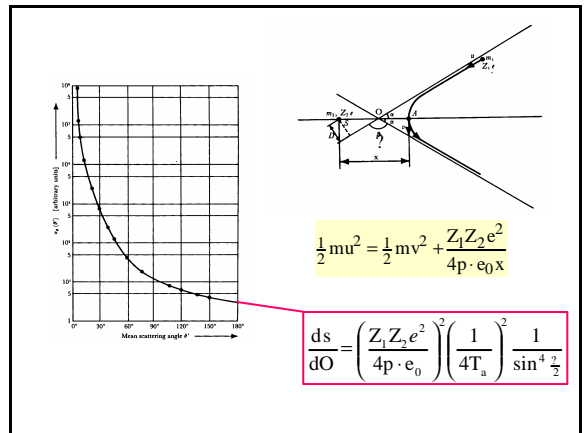
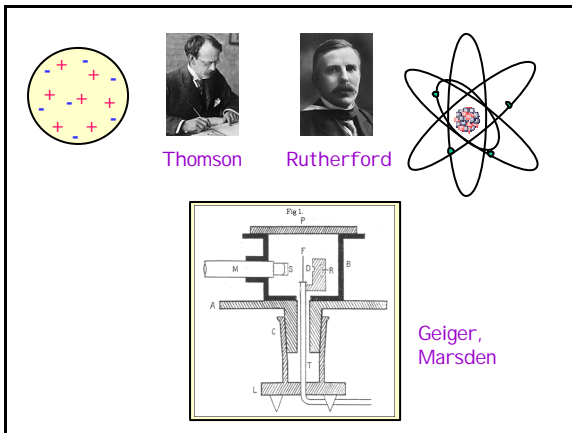
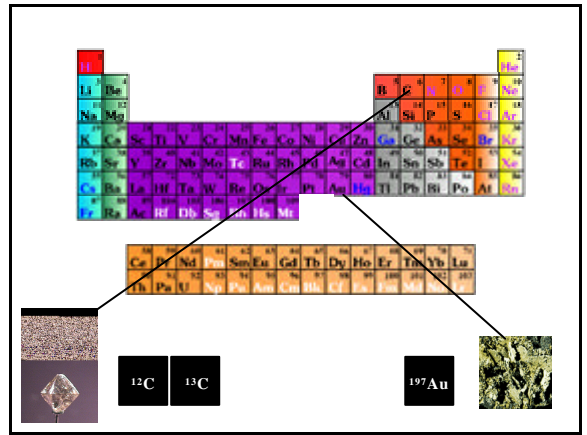
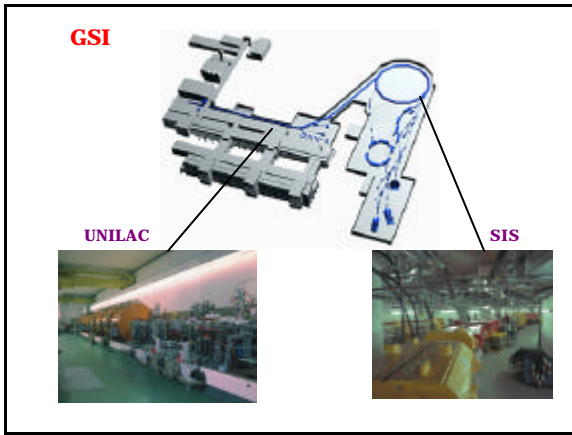


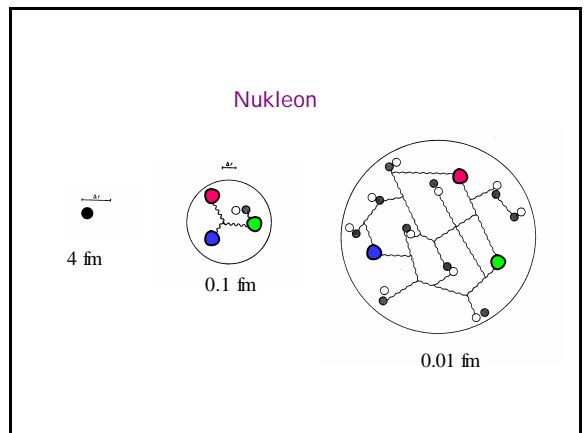
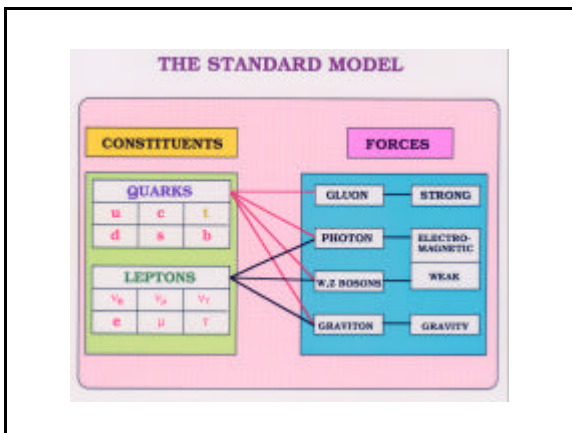
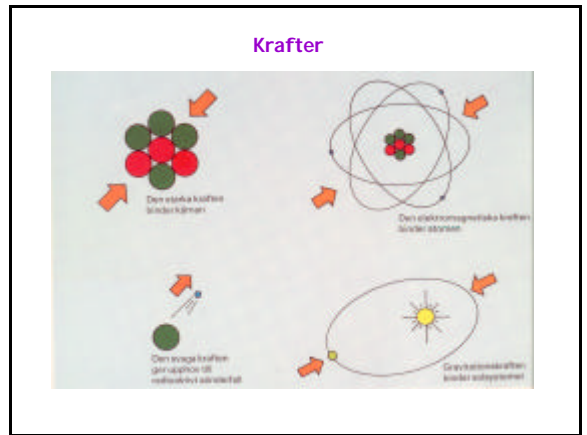
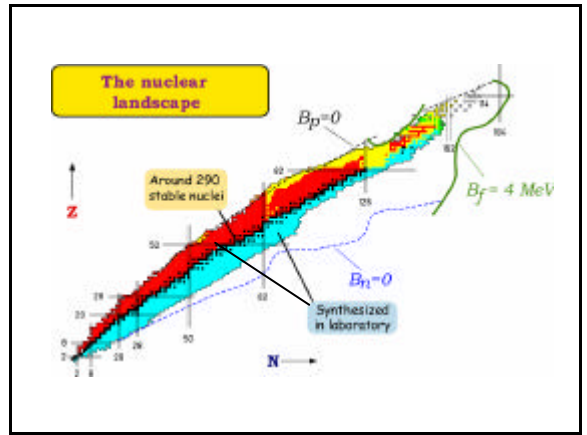
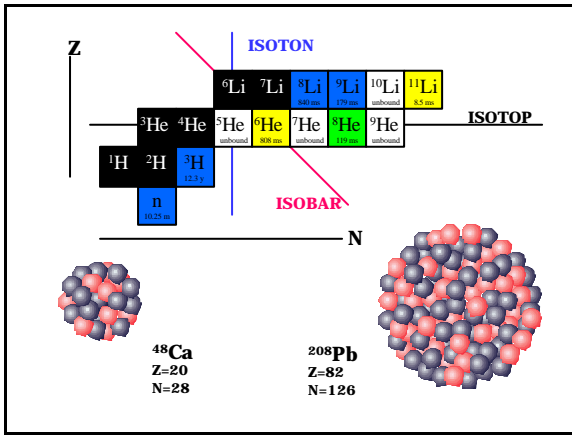
Fission




Reactions

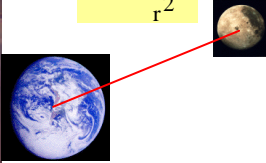









Isaac Newton
1643-1727

$$F = G \frac{m_1 m_2}{r^2}$$


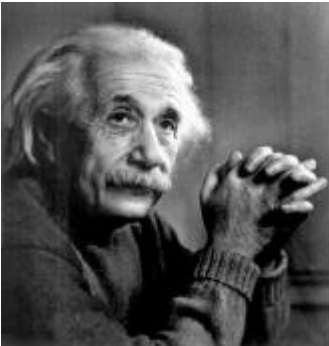
$G = 6.6726 \times 10^{-11} \text{ Nm}^2/\text{kg}^2$



Max Planck
1858 - 1947

$E = h\nu = \hbar\omega$

$\hbar = 1.054589 \times 10^{-34} \text{ Js}$



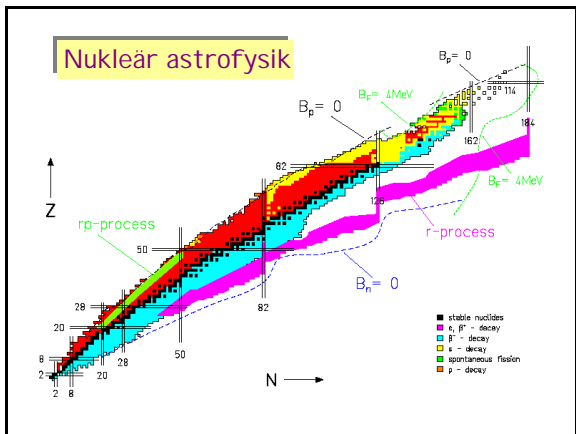
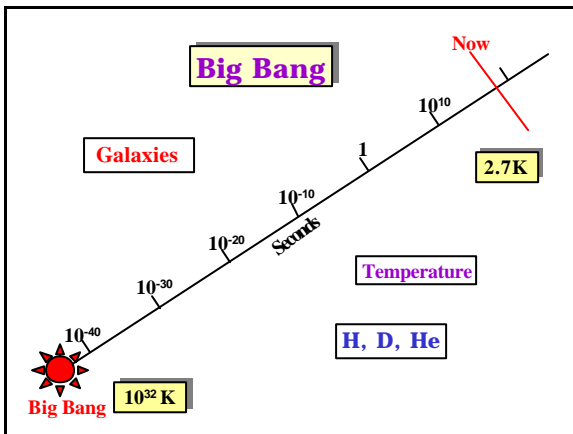
Albert Einstein
1879-1955

$E = mc^2$

$c = 299\,792\,458 \text{ m/s}$

The Planck Scale

Time	$\sqrt{\frac{\hbar G}{c^5}}$	$5.4 \times 10^{-44} \text{ s}$
Length	$\sqrt{\frac{\hbar G}{c^3}}$	$1.6 \times 10^{-35} \text{ m}$
Mass	$\sqrt{\frac{\hbar c}{G}}$	$1.2 \times 10^{19} \text{ GeV}/c^2$
Temperature		$1.4 \times 10^{32} \text{ K}$



The Crab Nebula

