

Nucleosynthesis - Gamow Window

$$k := 8.6 \cdot 10^{-8}$$

$$T := 2 \cdot 10^8$$

$$SF := 30000$$

$$b := 100$$

$$N(E) := \exp\left(\frac{-E}{k \cdot T}\right)$$

$$S(E) := \frac{SF}{E} \cdot \exp\left(\frac{-b}{\sqrt{E}}\right)$$

$$E_{\max} := 500$$

$$E_0 := \left(\frac{b \cdot k \cdot T}{2}\right)^{\frac{2}{3}}$$

$$IP(E) := \int_0^E N(E) \cdot S(E) dE$$

$$E_0 = 90.434$$

$$IP(E_0) = 1.966 \times 10^{-3}$$

$$E := 1 .. E_{\max}$$

