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Inaugural talk #1

- expertise successful in developing nonnuclear weapons will lead the way in economic rebirth.
- numerical simulation provides information not available in any other way.
- simulation attracts the brightest people
- " is environmentally benign.
- only concern is for reliability of information calculated

Sofronov

$$a(t_1), a(t_2)$$

$$a(t_2) - a(t_1) = \alpha a(t_1) (t_2 - t_1)$$

constant α

$$a' = \alpha a \Rightarrow a = a_0 e^{\alpha t}$$

$$\alpha > 0$$

two workers

$$a_1(t), a_2(t)$$

$$a_1' = \alpha_{11} a_1 + \alpha_{12} a_2$$

$$a_2' = \alpha_{21} a_1 + \alpha_{22} a_2$$

all constants

$$\begin{pmatrix} \alpha_{11} & \alpha_{12} \\ \alpha_{21} & \alpha_{22} \end{pmatrix}$$

$$a_i = c_{1i} e^{\lambda_1 t} + c_{2i} e^{\lambda_2 t}$$

$$\lambda_{1,2} = (\alpha_{11} + \alpha_{22} \pm \sqrt{(\alpha_{11} - \alpha_{22})^2 + 4\alpha_{12}\alpha_{21}}) / 2$$

$$\lambda_1 > \lambda_2$$

⇒ The rate of progress is faster for all if we work together

$$\lambda_1 > \max(\alpha_{11}, \alpha_{22}), \alpha_{12} \& \alpha_{21} > 0$$



⇒ classification will prevent meaningful collaboration.