



SYSTEM
HAMMERSTEINA

FIR
Zatřimý, zle
DIA $i > S$
 $\delta_i = 0$



$$y_k = \sum_{i=0}^{\infty} \delta_i w_{k-i} + z_k = \sum_{i=0}^{\infty} \delta_i \mu(u_{k-i}) + z_k$$

$$R(u) \stackrel{\text{def}}{=} E \left\{ \delta_0 \mu(u_k) + \sum_{i=1}^{\infty} \delta_i \mu(u_{k-i}) + z_k \mid u_k = u \right\} = \delta_0 \mu(u) + C_1$$

$$C_1 = \bar{w} \cdot \sum_{i=1}^{\infty} \delta_i$$

$$R(u, v) = E \{ y_k \mid u_k = u \wedge u_{k-1} = v \} = E \{ \delta_0 \mu(u_k) + \delta_1 \mu(u_{k-1}) + \sum_{i=2}^{\infty} \delta_i w_{k-i} + z_k \mid u_k = u, u_{k-1} = v \} =$$

$$= \delta_0 \mu(u) + \delta_1 \mu(v) + C_2, \text{ gdje } C_2 = \bar{w} \sum_{i=2}^{\infty} \delta_i$$

REGRESIJA NĚKOL S:

$$R(u^{(0)}, u^{(1)}, \dots, u^{(s-1)}) = \delta_0 \mu(u^{(0)}) + \delta_1 \mu(u^{(1)}) + \dots + \delta_s \mu(u^{(s-1)}) + C_s$$

$$C_s = \bar{w} \sum_{i=s}^{\infty} \delta_i$$