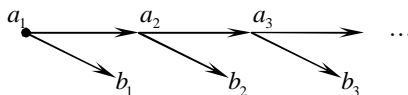


70-

$$\frac{a_1}{b_1 + \frac{a_2}{b_2 + \dots}}$$

[1]



« »

$$b_0 + \sum_{i_1=1}^N \frac{a_{i_1}}{b_{i_1} + \sum_{i_2=1}^N \frac{a_{i_1 i_2}}{b_{i_1 i_2} + \dots}}$$

[2].

()

$$\int_a^b \frac{a_1(\tau_1) d\tau_1}{b_1(\tau_1) + \int_a^b \alpha_2(\tau_1, \tau_2) + \dots} = D \int_a^b \frac{a_i(\tau^i) d\tau}{b_i(\tau^i)},$$

[3]; [4]; [5]

$\tau^i = (\tau_1, \tau_2 \dots \tau_i) \quad (i = 1, \infty),$
 $a_i(\tau^i), b_i(\tau^i), \in C[a; b]^i -$

$$D \int_a^{\tau_{i-1}} \frac{a_i(\tau^i) d\tau_i}{b_i(\tau^i)} \quad (\tau_0 = b)$$

[5]

[3]

$$\int_{E_1} \frac{a_1(s_1) \mu(ds_1)}{b_1(s_1) + \int_{E_2} \frac{a_2(s_1; s_2) \mu(ds_2)}{b_2(s_1; s_2) + \dots} \mu(ds_i)}$$

1.

2-

$$y(x) = 1 + \lambda \int_a^b \kappa(x; \tau) y(\tau) d\tau \tag{1}$$

(1)

$$y(x) = \frac{1}{1 - \lambda \int_a^b \frac{\kappa(x; \tau) y(\tau) d\tau}{y(x)}}$$

$$\frac{y(x)}{y(\tau)} = 1 + \frac{y(x) - y(\tau)}{y(\tau)} = 1 + \lambda \int_a^b \frac{[K(x, \tau_1) - (\tau, \tau_1)] y(\tau_1) d\tau_1}{y(\tau)}$$

$$\begin{aligned} \frac{y(x)}{y(\tau)} = 1 + \lambda \int_a^b \frac{[K(x; \tau_1) - K(x; \tau)] d\tau_1}{\frac{y(\tau_1)}{y(\tau)}} = 1 + \lambda \int_b^a \frac{[K(\tau; \tau_2) - K(\tau_1; \tau_2)] d\tau_2}{1 + \dots} \\ + \lambda \int_a^b \frac{[K(\tau_{n-2}; \tau_n) - K(\tau_{n-1}; \tau_n)] d\tau_n}{\frac{y(\tau_{n-1})}{y(\tau_n)}} \end{aligned}$$

$n \rightarrow \infty$

$$y(x) = \frac{1}{1 + \lambda \int_a^b \frac{-K(x; \tau) d\tau}{1 + \lambda \int_a^b \frac{[K(x; \tau_1) - K(\tau; \tau_1)] d\tau_1}{1 + \lambda \int_a^b \frac{[K(\tau; \tau_1) - K(\tau_1; \tau_2)] d\tau_2}{1 + \dots}}}$$

$$y^{-1}(x) = f(x) + \lambda \int_a^b K(x; \tau) y(\tau) d\tau$$

ø

$$y(x) = \frac{1}{f(x) + \int_a^b \frac{K(x; \tau_1) d\tau_1}{f(\tau_1) + \int_a^b \frac{K(\tau_1; \tau_2) d\tau_2}{(\tau_2) + \dots}}$$

$$y(x) = f(x) + \lambda \int_a^b \frac{K(x; \tau) d\tau}{c(\tau) + y(\tau)}$$

$$H(t) = 1 + \int_0^1 \frac{t\varphi(\tau)}{t + \tau} H(t)H(\tau) dt, \tag{2}$$

$$\int_0^1 \varphi(\tau) d\tau \leq \frac{1}{2}$$

$$H(t) = \frac{1}{1 - \int_0^1 \frac{f(t; \tau_1) d\tau_1}{1 - \int_0^1 \frac{f(\tau_1; \tau_2) d\tau_2}{1 - \dots}}}, \quad f(t; \tau) = \frac{t\varphi(\tau)}{t + \tau}, \quad \tau_0 = t \tag{2}$$

$$H(t) = \left(b + D \int_0^1 \frac{\tau_i \varphi(\tau_i)}{\tau_{i-1} + \tau_i} d\tau_i \right)^{-1}$$

$$b = (1 - 2 \int_0^1 \varphi(\tau) dt)^{1/2}, \quad \tau_0 = t.$$

3.

$$y y' = f_2(x) y + f_1(x) \\ y(a) = y_0; \quad f_1(x) \neq 0, \quad x \in [a; x]$$

$$y(x) = y_0 + \int_a^x f_2(x) dx + x \int_a^x \frac{f_1(x) dx}{y(x)}$$

$$y(x) = f(x) + \int_a^x K(x; \tau) y^{-1}(\tau) d\tau$$

$$y(x) = f(x) + \int_a^x \frac{K(x; \tau_1) d\tau_1}{f(\tau_1) + \int_a^{\tau_1} \frac{K(\tau_1; \tau_2) d\tau_2}{f(\tau_2) + \dots}}$$

5.

$$\begin{cases} \dot{x} = \frac{K}{m} - \alpha \\ \dot{y} = Ax - \beta \\ \dot{m} = C\gamma - \gamma m \end{cases}$$

$x = x(t), m = m(t), y = y(t)$

$$y(t) = y_0 + A \int_0^t x(\tau) d\tau - \beta t;$$

$$m(t) = f(t) + L \int_0^t e^{j(s_1-t)} \left(\int_0^{s_1} x(s_2) ds_2 \right) ds_1;$$

$$x(t) = x_0 - \alpha t + K \int_0^t \frac{ds}{m(s)},$$

$$f(t) = m_0 e^{-jt} + \frac{c}{g^2} (\beta j t - y_0 j + \beta) + \frac{c}{j_2} (y_0 j - \beta) e^{jt}; \quad L = AC$$

x(t)

$$x(t) = x_0 - Lt + \int_0^t \frac{ds}{\varphi(s) + \alpha \int_0^s \int_0^{s_1} \int_0^{s_2} \frac{e^{\alpha(s_1-s_2)} ds_1 ds_2}{\varphi(s_2) + \dots}}$$

ø

$$\sum_{i_1=1}^n \int_a^b \frac{K(t; \tau_1) d\tau_1}{B_{i_1} + \sum_{i_2=1}^n \int_a^b \frac{K(\tau_1; \tau_2) d\tau_2}{B_{i_2} + \dots}}$$

1. ... , 1974, .269.
2. ... , 1986, .174.
3. ... , 1994, .204.
4. ... , 119, , 1974, .144-146.
5. ... , 1986.