[illegible] 517.622

[illegible]

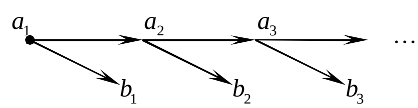
[illegible]

[illegible]

[illegible] 70-[illegible] [1]

$$\cfrac{a_1}{b_1+\cfrac{a_2}{b_2+\cdots}}$$

[illegible]



[illegible]

$$b_0+\sum_{i_1=1}^{N}\cfrac{a_{i_1}}{b_{i_1}+\sum\limits_{i_2=1}^{N}\cfrac{a_{i_1 i_2}}{b_{i_1 i_2}+\cdots}}$$

[illegible] [2].

[illegible]

[illegible] [3]; [4];[5]

$$\int_a^b \frac{a_1(\tau_1)d\tau_1}{b_1(\tau_1)+\int\limits_a^b \alpha_2(\tau_1,\tau_2)+\cdots} = \underset{i=1}{\overset{\infty}{D}} \int_a^b \frac{a_i(\tau^i)d\tau}{b_i(\tau^i)},$$

[illegible] $\tau^i = (\tau_1, \tau_2 \ldots \tau_i) \quad (i = 1, \infty)$,

$a_i(\tau^i),\ b_i(\tau^i),\ \in\ C[a;b]^i$ - [illegible].

[illegible]

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

ɿ tɕtsʙtslsʿ [5] ʙʟʣs ɘfɱʘʣsɘʤʝʤs ts ɥfɪ ɼ ʿ ꞩtsʤsɕʤʝʤsʘʣ ʤɕʃʤʒ ʘʣʘʣsɢtsʤʒ ɹ ʃ ɼ tsʜʝ tɕꞑ ʘʣsɢts ɘ tɕʝ ʟʟʣ lsʘlsʿ ʟʘʒʿʤɕʃ fɱʃʤɘ tsʤɘ fɪʟʤʒɘʘʣʣ ʤʘ fɱʃʤɘ tsʤɕʃ ʿʤsʝ ɢtɕʣɘʘʣʘʣ. ʇ tɕts. ʉ ɘʘɘꞩts ʃ .ʉ. tɕtsʟɢʤʜʘ ʿʤsʝ ɢtɕʘʣʣ ʤ ʤʘʤʯ ɢtsɘʿ ʜtɕtsʙɕʃ ʃʃts ʤʒtɕ [3]

$$\int_{E_1} \frac{a_1(s_1)\mu(ds_1)}{b_1(S_1) + \int_{E_2} \dfrac{a_2(s_1;s_2)\,\mu(ds_2)}{b_2(s_1;s_2) + \cdots}}$$

ʇ tɕʃ ɘɕʙtstɕ ʤʘʤʝ ꞑ ʤɕʃʤʒ fɱʃtsfɱʙtsʤʒ ʤʒtɕʃ $\mu(ds_i)$ ꞩ ɥʘfɪlsɕʃʤʣ ɘɕʃʃʘʜꞩɕʃ tsʜʝ tɕꞑ ʟʿʤʒs ʟɘɕʃɥʘʔʤ, ɢʿʤʣ fɪlsʿ, ʤʒʘlstɕʃɥʤ, tsʃʝ tɕʘlststɕʣ lsʘʿʤsʝ ɢtɕʘʣ ʤ ʜtɕtsʙɕʃ ʟ ʿʤsʝ ɢtɕʘʤʘʤʒʃ ʈ ʿʤʝ ʤʘ ʉ lsʿʤs ʿfɱ ʘʙts ʃ ʝ ʙ ʝ ɢʘ ʉ lsʿʤs ʿfɱ ɿ ɕʃɘɥʝ ʤʣʤʒ lsʘꞩɕʃ ꞊ ʜtɕtsʙʿɘ ʟʘʔʤʒʘʤʃfɪ ʉ ɘʘɘꞩts ʃ .ʉ., ʃ ɕʃ꞊ʘʣ ɥʟꞩ ʈ .ɯ, ɹ ʘꞩ ꞩʘ ʒ .ʈ., ʃ ʜʤsɘtsʤsɘʘʊ. ʃ . lsʘʿʤ.

ɼ tsɥʿʤ ʤfɪlsʿ ɘɘʝ ʜʝ ʤʣ ɘ ʤʒʘlsʝ ʤʒʘlsɕʃꞩʟ ʃʃtsʤlsls ɥfɪ ɼ ʙʟʣs ʃʿʜlsɘʝ tɕʜꞑ ʝ ʤs ʤʘ ꞩtsʤꞩ tɕʝ lsʤɕʃ꞊ ʃtɕɕʃꞩ ʤʘʜʘ꞊ ʤʘ ʟʘʜʘɥʘ꞊. ʅ ʟʃ ɕʃʤɕʃʤʒfɱ ʤʘʜʝ ꞩɕʃ꞊ ʟ ʤɕʃ꞊:

ʇ tɕʃꞩ ʤʘʜ 1. ʈ tsʟɢʤʣ ʤʝ ʤʒs ʤʣʔʤʝ ʿʤsʝ ɢtɕʘʣ ʤʝ tɕʿɘʤʣ ʤʣ ʌ tɕʝ ʜɢtsʤʒʘ 2-ɢts tɕtsʜʟ

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

ʇ tɕʝ ʜfɪlsʘɘɕʃʤʒs tɕtsʟɘʘʟtsꞩ tɕʿɘʤʣ ʤʣ (1) ʟ ɘɕʃɢʤʜʿ tstɕʤʒʘʣ ʤsɢts ɥfɪ ɼ . ʃ tsꞑ ʤʘʟʘʃ ɕʃfɱʘlsɕʃ

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

ʿ

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

ɿ ɕꞩtstɕʃfɪlsʘɘ ɕ tsfɪlsʘʤʣ fɱʃʿɘɘʿʜʤs ʝ ʤʣ ʤ꞊tsʤʒʿlsʝ tɕʘɥʿʔ tslstɕʃʤʒʟʿʤʒs

$$\frac{y(x)}{y(\tau)} = 1 + \lambda \int_a^b \frac{\left[K(x;\tau_1) - K(x;\tau)\right] d\tau_1}{\dfrac{y(\tau_1)}{y)\tau_1)}} = 1 + \lambda \int_b^a \frac{\left[K(\tau;\tau_2) - K(\tau_1;\tau_2)\right] d\tau_2}{1 + \begin{array}{c} \vdots \\ + \lambda \displaystyle\int_a^b \frac{\left[K(\tau_{n-2};\tau_n) - K(\tau_{n-1};\tau_n)\right] d\tau_n}{\dfrac{y(\tau_{n-1})}{y(\tau_n)}} \end{array}}$$

ʇ tɕʃ $n \to \infty$ ʃtɕɕʃ꞊tsʜɕʃʤʒs ʜts ʤʝ fɱꞩ ʿʤʯʝ ʤsɢts ɥfɪ ɼ

$$y(x) = \cfrac{1}{1 + \lambda \displaystyle\int_a^b \cfrac{-K(x;\tau)d\tau}{1 + \lambda \displaystyle\int_a^b \cfrac{\left[K(x;\tau_1) - K(\tau;\tau_1)\right] d\tau_1}{1 + \lambda \displaystyle\int_a^b \cfrac{\left[K(\tau;\tau_1) - K(\tau_1;\tau_2)\right] d\tau_2}{1 + \cdots}}}}$$

ʈ tsʟɢʤʣ ʤʝ ʤʒs lsʝ ʃʝ tɕ ʤʝ ʤʣʔʤʝ tɕʿɘʤʣ ʤʣ lsɕʃʃʟ ʃtsʜɘʿʔ ʤsɢts ʘɕɢʟʤʒʝ ʤslsʟ

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

ʈ tsʟɘʘʟꞩʟ lsʘꞩtsɢts tɕʿɘʤʣ ʤʣ ɘʿʜʃtsɘʿʜʘ ɥfɪ ɼ

$$y(x) = \cfrac{1}{f(x) + \displaystyle\int_a^b \cfrac{K(x;\tau_1)d\tau_1}{f(\tau_1) + \displaystyle\int_a^b \cfrac{K(\tau_1;\tau_2)\vartheta\tau_2}{\Theta(\tau_2) + \cdots}}}.$$

[illegible]

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

[illegible]

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

[illegible] $\varphi(t)$ - [illegible] $\int_0^1 \varphi(\tau)d\tau \le \frac{1}{2}$

[illegible]

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

[illegible] (2) [illegible]

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

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

[illegible] 3. [illegible] 2-[illegible]

$$y\, y^1 = f_2 = (x)\, y + f_1(x)$$

$$y(a) = y_0; \quad f_1(x) \ne 0, \quad x \in [a; x].$$

[illegible] 2-[illegible]

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

[illegible]

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

[illegible]

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

[illegible].

[illegible] 5. [illegible]

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

[illegible] K, A, C, α, β, γ [illegible].

$x = x(t),\ m = m(t),\ y = y(t)$ - [illegible]

[illegible]

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

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

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

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

[illegible] x(t) [illegible]

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

[illegible] L [illegible]

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

[illegible]

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