[illegible]

[illegible] . ([illegible])

[illegible] . ([illegible])

[illegible] S^2 [illegible] S^3 [illegible]

[illegible] S^2 [illegible] S^3 [illegible]

[illegible]

[illegible] [1]. [illegible] [2], [illegible] [3] [illegible]

[illegible]

[illegible] 1,2,é ,n. [illegible]

tsнdzsLdzΘųdzs tsʃtɕj нj dzʸdzʃ ɘj tɕtsʷlsdzsfŋļsᶦ ʢΘɿ нtsʔ tɕΘLdzsɘʃнdzsfŋļsʃ k нdzʸ dzj tʃtsfŋtɕj нfŋļsɘj dzdzsǤts tʃtslstsdʒʢΘ tʃj tɕɘtsǤts tʃtsʢtsdzj dzʃʷ. ʃ вtsLdzΘųʃdʒ ˡlsdz ɘj tɕtsʷlsdzsfŋļsᶦ

(«ʢtsˡ ʷʷ ʃųʃj dzs dzΘfŋdzj нtsɘΘdzdzsfŋļs») ųj tɕj L $p_{ij,k}$. ʃ ųj ɘʃнdzs, ųlsts ɘ ˡlstsdʒ fŋdzdzųΘj ɘʳ tʃtsdzdzj dz lzfŋdztsɘʃʷ:

$$p_{ij,k} \geq 0, \qquad \sum_{k=1}^{n} p_{ij,k} = 1 \qquad \text{нdzʸ ɘfŋj} \ i, j, k$$

ɟ tɕj нʃtsdztsʏʃdʒ ųlsts tʃtsʃlzdzʸųʃʷ dzΘ fŋ lstsdz ʢts ɘj dzʃʢΘ ųlsts dʒtsʏdzs tʃtɕj dzj вtɕj ųᶦ ʷdz ʢlsdzΘųʃʷdʒʃ ųΘfŋļstsls. ʊtsǤнΘ j j fŋļsfŋļstsʷdzʃʷ dʒtsʏdzs tstʃʃfŋ ɘΘlsᶦ dzΘвtstɕtsdʒ $x = (x_1, x_2, ..., x_n)$ tɕtsнʃlsj dz fŋʢʃj tʃΘɕ i ʃ j tsвtɕΘLdzʙ lsfŋʸ fŋɘj tɕtsʷlsdzsfŋļsᶦ ʙ $x_i x_j$ ʃ, fŋdzj нtsɘΘlsj dz dzs,

$$x_k^{'} = \sum_{i,j=1}^{n} p_{ij,k} x_i x_j \qquad (1)$$

вlzнj ls tʃtsdzdztsʔ ɘj tɕtsʷlsdzsfŋļsᶦ ʙ ʢ fŋtɕj нʃ dzj tʃtsfŋtɕj нfŋļsɘj dzdz ꞊ tʃtslstsdʒʢtsɘ.

ʃ dztsʏj fŋļsɘts $S^{n-1} = \{x = (x_1, x_2, ..., x_n) : x_i \geq 0, \quad \text{i=1,2,...,n}, \quad \sum_{i=1}^{n} x_i = 1\}$

dzΘLʳ ɘΘj lsfŋʸ $n-1$ -dzj tɕdz dʒ fŋʃdʒʃ dzj ʢfŋdʒ ʃ, lsΘʢ ʢΘʢ $\sum_{k=1}^{n} x_k^{'} = 1$ ʃ $x_k^{'} \geq 0$, lsts tslststsвtɕΘɿj dzʃj (1), dzΘLʳ ɘΘj dʒtsj ʢɘΘнtɕΘlsʃųdz dʒ fŋļsts꞊Θfŋļsʃųj fŋʢʃdʒ tstʃj tɕΘlststɕtsdʒ tʃj tɕj ɘtsнʃls fŋʃdʒʃ dzj ʢfŋ S^{n-1} ɘ fŋj вʷ. ʉtɕj нʃ dʒΘlsj dʒΘlsʃųj fŋʢʃ꞊ dʒtsнj dzj ʔ Ǥj dzj lsʃʢʃ ɘΘɿ dzdzʙ tɕtsdz ʃǤtɕΘ ls dʒtsнj dzʃ, tʃtstɕtsʏ нj dzdz j ʢɘΘнtɕΘlsʃųdz dʒʃ tstʃj tɕΘlststɕΘdʒʃ.

ʃ нdztsʔ ʃL tsfŋdztsɘdz ꞊ LΘнΘɿ ʃLlzųj dzʃʷ ʢɘΘнtɕΘlsʃųdz ꞊ tstʃj tɕΘlststɕtsɘ ʷɘdzʸj lsfŋʸ ʃfŋfŋdzj нtsɘΘdzʃj lstɕΘj ʢlststɕʃʔ ʢɘΘнtɕΘlsʃųdz ꞊ tstʃj tɕΘlststɕtsɘ. ʢ lstsʔ tʃtɕtsвdzj dʒj tʃtsfŋʷʰ j dz dʒdztsǤtsųʃfŋdzj dzdz j tɕΘвtslsʳ; ʃLlzųj dzʃʙ ˡtɕǤtsнʃųj fŋʢʃ꞊ fŋtsʔfŋļsɘ ʢɘΘнtɕΘlsʃųdz ꞊ tstʃj tɕΘlststɕtsɘ tʃtsfŋʷʰ j dz tɕΘвtslsʳ.

1.1. ʃ tʃʃfŋΘdzʃj ʢtsdzfŋļstɕdzʢųʃʃ ʢɘΘнtɕΘlsʃųdz ꞊ fŋļsts꞊Θfŋļsʃųj fŋʢʃ꞊ tstʃj tɕΘlststɕtsɘ

ʈ Θfŋfŋdʒlstɕʃdʒ dzj ʢtslststɕdzʙ вʃtsdztsǤʃųj fŋʢlzʙ, ls.j LΘdʒdzdzlstsj tslsdztsfŋʃlsj dz dzs tɕΘLdʒdztsʏj dzʃʷ fŋtstsвʰ j fŋļsɘts tstɕǤΘdzʃLdʒtsɘ. ɟ tɕj нdztsʏʃdʒ ųlsts ʢΘɿ нΘʸ tsfŋtsвᶦ, ɘ꞊tsнʷʰ Θʸ ɘ tʃtsʃlzdzʸųʃʙ tʃtɕʃdzΘнdzj ʏʃls dzj ʢtslststɕtsʔ j нʃdzfŋļsɘj dzdztsʔ ʃL n tɕΘLdztsɘʃнdzsfŋļsj ʔ Ǥнj 1,2,é ,n. ʐ ʢΘdzΘ tɕΘLdztsɘʃнdzsfŋļsj ʔ (ñtʃtɕʃLdzΘʢtsɘò ʷj dztslsʃtʃtsɘ, Ǥj dztslsʃtʃtsɘ,) нtsdzʏ dzΘвʳ ls lsΘʢtsʔ, ųlstsвʳ tɕΘLdztsɘʃнdzsfŋļsj ʔ tɕtsнʃlsj dzj ʔ

[illegible] $P_{ij,k}$. [illegible]:

$$P_{ij,k} \geq 0, \qquad \sum_{k=1}^{n} P_{ij,k} = 1 \quad , \quad \text{i,j,k.}$$

[illegible]

[illegible] $x = (x_1, x_2, ..., x_n)$ [illegible] x_i [illegible] i [illegible].

[illegible] $x = (x_1, x_2, ..., x_n)$ [illegible] i [illegible] j [illegible] $x_i x_j$ [illegible],

$$x_k^{'} = \sum_{i,j=1}^{n} P_{ij,k} x_i x_j \qquad (1.1.1)$$

[illegible] k [illegible].

[illegible]

$$S^{n-1} = \{x = (x_1, x_2, ..., x_n) : x_i \geq 0, \ \text{i=1,2,...,n}, \ \sum_{i=1}^{n} x_i = 1\}$$

[illegible] n-1 [illegible] $\sum_{k=1}^{n} x_k^{'} = 1$ [illegible] $x_k^{'} \geq 0$ [illegible] (1.1.1) [illegible] S^{n-1} [illegible].

[illegible]

[illegible] (Ω,L) [illegible] Ω [illegible] L-[illegible].

[illegible] Λ -[illegible]

[illegible] $\sigma:\Lambda\to\Phi$ [illegible] $S(\Lambda,\Phi)$ [illegible] $S(\Lambda,\Phi)$ [illegible] $\{\ldots_i\}$ [illegible] $(\ldots,L)$, $i=1,2,\ldots n$. [illegible] $\sigma_1,\sigma_2\in\Omega$

$$A(\sigma_1,\sigma_2)=\{x\in\Lambda:\ \sigma_1(x)=\sigma_2(x)\}$$

И

$$\tilde{A}(\sigma_1,\sigma_2)=\bigcup_{j:\Lambda(\sigma_1,\sigma_2)\cap\Lambda_i\neq\varnothing}\Lambda_i$$

[illegible] $\tilde{A}(\sigma_1,\sigma_2)\neq\varnothing$, [illegible]

$$\Omega(\Lambda,\tilde{A}(\sigma_1,\sigma_2))=\left\{(\sigma\in\Omega:\sigma=\sigma_1\in\tilde{A}(\sigma_1,\sigma_2)\cdot[illegible]\cdot\sigma_2=\sigma\in\tilde{A}(\sigma_1,\sigma_2)\right\}$$

[illegible] $\tilde{A}(\sigma_1,\sigma_2)=\varnothing$, [illegible]

$$\Omega(\Lambda,\tilde{A}(\sigma_1,\sigma_2))=\left\{(\sigma\in\Omega:\sigma=\sigma_1\in\Lambda_i\cdot[illegible]\cdot\sigma=\sigma_2\in\Lambda_i\cdot[illegible]\cdot i=1.....n\right\}$$

[illegible] $\mu\in S(\Lambda,\Phi)$ - [illegible] $\mu(\sigma)>0$ [illegible] $\sigma\in\Omega$ [illegible] $P_{\sigma_1\sigma_2,\sigma}$ [illegible]

$$P_{\sigma_1\sigma_2,\sigma}=\begin{cases}\dfrac{\mu(\sigma)}{\mu(\Omega(\Lambda,\tilde{A}(\sigma_1\sigma_2)))}, [illegible]\cdot\sigma\in\Omega(\Lambda,\tilde{A}(\sigma_1\sigma_2))\\ 0, [illegible]\end{cases}\qquad(1.1.2)$$

[illegible] V, [illegible] $S(\Lambda,\Phi)$ [illegible] (1.1.2), [illegible] $\lambda\in S(\Lambda,\Phi)$ [illegible] $V\lambda=\lambda'\in S(\Lambda,\Phi)$ [illegible]

$$\lambda'(\sigma)=\sum_{\sigma_1,\sigma_2\in\Omega}P_{\sigma_1\sigma_2,\sigma}\lambda(\sigma_1)\lambda(\sigma_2)\qquad(1.1.3)$$

[illegible] $\sigma \in \Omega$.

[illegible]

$$P_{\sigma_1\sigma_2,\sigma} \geq o, \quad \sum_{\sigma\in\Omega} P_{\sigma_1\sigma_2,\sigma} = 1 \text{ è } P_{\sigma_1\sigma_2,\sigma} = P_{\sigma_2\sigma_1,\sigma} \quad [illegible] \quad \sigma_1, \sigma_2, \sigma \in \Omega$$

[illegible] (1.1.3) [illegible] (Λ, L), [illegible] Λ [illegible] μ.

[illegible] (1.1.1) [illegible]

$$P_{ij,k} = \begin{cases} \neq 0 & [illegible] \text{ i=j } [illegible] \text{ j=k} \\ 0 & [illegible] \end{cases}$$

[illegible] 1.1.1. [illegible] $|\Phi| > 1$ [illegible] $|\Lambda > 1|$ [illegible] (1.1.3.) [illegible]

(Λ, L) [illegible].

[illegible] (Λ, L) [illegible]. [illegible] $A(\sigma_1, \sigma_2) = \Lambda$, [illegible], $\Omega(\Lambda, \tilde{A}(\sigma_1, \sigma_2)) = \{\sigma_1\}$ [illegible] $A(\sigma_1, \sigma_2) \neq \Lambda$, $A(\sigma_1, \sigma_2) \neq \varnothing$, [illegible] $\tilde{A}(\sigma_1, \sigma_2) = \Lambda$ [illegible] $\Omega(\Lambda, \tilde{A}(\sigma_1, \sigma_2)) = \{\sigma_1, \sigma_2\}$. [illegible] $\tilde{A}(\sigma_1, \sigma_2) \neq \varnothing$ [illegible] $\Omega(\Lambda, \tilde{A}(\sigma_1, \sigma_2)) = \{\sigma_1, \sigma_2\}$ [illegible] $P_{\sigma_1\sigma_2,\sigma} = 0$ [illegible] $\sigma \neq \sigma_1 \cdot [illegible] \cdot \sigma \neq \sigma_2$, [illegible]. [illegible] (1.1.3.) [illegible] μ [illegible] σ_1, σ_2 [illegible] $\Omega(\Lambda, \tilde{A}(\sigma_1, \sigma_2)) = \{\sigma_1, \sigma_2\}$, [illegible] (Λ, L). [illegible].

[illegible] Λ [illegible] $\sigma(x)$ [illegible] [3], [illegible] [4 [illegible] α. [illegible] $\Phi = \{A, \alpha\}$ [illegible].

1.2.

$|\Lambda| = n$ $\Phi = \{A, \alpha\}$. $\sigma \in \Omega$ $n_A(\sigma)$ σ μ_α Ω

$$\mu_\alpha(\sigma) = p^{n_A(\sigma)} q^{n - n_A(\sigma)}$$

$p \geq 0$, $q \geq 0$ $p + q = 1$ $p / q = \alpha$. $p = q$, $\alpha = 1$, μ_1 Ω. (Λ, L) Λ α_1 è α_2 $n_A(\sigma_1) = n_A(\sigma_2)$

$\Omega = \{\tilde{\sigma}_1, \tilde{\sigma}_2, ..., \tilde{\sigma}_n,$ $\tilde{\sigma}_i$ $n_A(.) = i\}$

$$\mu_\alpha(\tilde{\sigma}_i) = c_n^i p^i q^{n-1} \qquad (1.2.1)$$

$\tilde{V}_\alpha$ (1.2.1)

$$S(\Omega) = \{x = (x_1, x_2, ..., x_n) : x_i \geq 0, \; i = \overline{0, n}, \; \sum_{i=1}^{n} x_i = 1\}$$

[4].

$p = q = 1/2$ Λ, $|\Lambda| = n$

1. $n = 1$. 1971 [4]

$p_{AA,A}$ A

$p_{Aa,A}$ [illegible] A

$p_{aa,A}$ [illegible] A

[illegible] $p_{...,a} = 1 - p_{...,A}$.

[illegible] x_1 [illegible] x_2 [illegible] A [illegible] α [illegible] $(x_1, x_2) \in S^1$ [illegible] (1.1.1)

$$\begin{cases} x_1^{'} = p_{AA,A} x_1^2 + 2 p_{Aa,A} x_1 x_2 + p_{aa,A} x_2^2 \\ x_2^{'} = p_{AA,a} x_1^2 + 2 p_{Aa,a} x_1 x_2 + p_{aa,a} x_2^2 \end{cases} \qquad (1.2.3)$$

[illegible]

$$\begin{array}{lll} p_{AA,A} = 1 & p_{Aa,A} = 1/2 & p_{aa,A} = 0 \\ p_{AA,a} = 0 & p_{Aa,a} = 1/2 & p_{aa,a} = 1 \end{array} \qquad (1.2.4)$$

[illegible] (1.2.4) [illegible] (1.2.3), [illegible]

$$\begin{cases} x_1^{'} = x_1^2 + x_1 x_2 \\ x_2^{'} = x_2^2 + x_1 x_2 \end{cases}$$

[illegible] $x_1 + x_2 = 1$ [illegible]

$$\begin{cases} x_1^{'} = x_1 \\ x_2^{'} = x_2 \end{cases} \qquad (1.2.5)$$

[illegible]

[illegible] (1.2.1). [illegible]

[illegible]: $p_{AA,A} = a$, $p_{Aa,A} = b$, $p_{aa,A} = c$, [illegible]

$$x = ax^2 + 2bx(1-x) + c(1-x)^2 ,$$

[illegible]

$$x = (a - 2b + c)x^2 + 2(b - c)x + c$$

[illegible]

$$\begin{cases} a - 2b + c = 0 \\ 2(b - c) = 1 \\ c = 0 \end{cases}$$

[illegible] $a = 1$, $b = 1/2$, $c = 0$ [illegible] (1.2.1).

[illegible] (1.2.5) [illegible] $V(S^1) = S^1$.

2. [illegible] $n = 2$. [illegible] $x = (x_1, x_2, x_3) \in S^2$ -[illegible] AA, Aa, aa [illegible] $\{p_{ij,k}\}_{i,j,k=1}^{3}$ [illegible]

$$\begin{pmatrix} 1 & 1/4 & 0 & 1/2 & 0 & 0 \\ 0 & 1/2 & 0 & 1/2 & 1 & 1/2 \\ 0 & 1/4 & 1 & 0 & 0 & 1/2 \end{pmatrix}$$

[illegible] (1.1.1). [illegible] (1.1.1) [illegible]

$$\begin{cases} x_1' = x_1^2 + x_1x_2 + 1/4x_2^2 \\ x_2' = x_1x_2 + 1/2x_2^2 + 2x_1x_3 + x_2x_3 \\ x_3' = 1/4x_2^2 + x_2x_3 + x_3^2 \end{cases}$$

[illegible]

$$\begin{cases} x_1' = (x_1 + 1/2x_2)^2 \\ x_2' = 2(x_1 + 1/2x_2)(x_3 + 1/2x_2) \\ x_3' = (x_3 + 1/2x_2)^2 \end{cases} \qquad (1.2.6)$$

[illegible], (1.2.6) [illegible] x_1', x_2', x_3' [illegible] x_1, x_2, x_3 [illegible]

$$\begin{cases} x_1'' = (x_1' + 1/2x_2'')^2 \\ x_2'' = 2(x_1' + 1/2x_2')(x_3' + 1/2x_2') \\ x_3'' = (x_3' + 1/2x_2')^2 \end{cases} \qquad (1.2.7)$$

[illegible] (1.2.7) [illegible] (1.2.6), [illegible]

$$\begin{cases} x_1'' = (x_1 + 1/2x_2)^2 \\ x_2'' = 2(x_1 + 1/2x_2)(x_3 + 1/2x_2) \\ x_3'' = (x_3 + 1/2x_2)^2 \end{cases}$$

[illegible]

[illegible] 1.2.2. [illegible]

[illegible]

[illegible] (1.2.6) [illegible] (0;1;0) [illegible]

3. [illegible] $n = 3$. [illegible] $x = (x_1, x_2, x_3, x_4) \in S^3$-[illegible] AAA, AAa, Aaa, aaa [illegible] AAA, AAa, Aaa, aaa [illegible] 1, 2, 3, 4 [illegible] $(p_{ij,k})_{i,j,k=1}^4$ [illegible]

$$\begin{pmatrix} 1 & 2/9 & 0 & 0 & 1/2 & 1/6 & 0 & 1/18 & 0 & 0 \\ 0 & 5/9 & 2/9 & 0 & 1/2 & 2/3 & 1/2 & 4/9 & 1/6 & 0 \\ 0 & 2/9 & 5/9 & 0 & 0 & 1/6 & 1/2 & 4/9 & 2/3 & 1/2 \\ 0 & 0 & 2/9 & 1 & 0 & 0 & 0 & 1/18 & 1/6 & 1/2 \end{pmatrix}$$

Y Ꮎfiŀstsŀs Gĵ dẑsŀsɕʃtʃtsə tsŀs ʈʃtsʕtsdẑ dẑʃ ʕ ʈʃtsʕtsdẑ dẑʃ ɕʟdʒ dẑ ŀsfiŋ ʈʃts tstedʒdẑ (1.1.3). ɿ tsʜfiŀsʘəʣ ə (1.1.3) ə ʲ ɮʕʘʟʘdẑ ʲ əʲ tets ŀsdẑsfiŀsɕ, ʈʃtsdẑʋɕdʒ

$$\begin{cases} x_1' = x_1^2 + x_1x_2 + 2/9x_2^2 + 1/3x_1x_3 + 1/9x_2x_3 \\ x_2' = x_1x_2 + 5/9x_2^2 + 4/3x_1x_3 + 8/9x_2x_3 + 2/9_3^2 + x_1x_4 + 1/3x_2x_4 \\ x_3' = x_1x_4 + 5/9 + 4/3x_4x_2 + 8/9x_2x_3 + 2/9x_2^2 + x_3x_4 + 1/3x_1x_3 \\ x_4' = 2/9x_3^2 + x_4^2 + 1/9x_2x_3 + 1/3x_2x_4 + x_3x_4 \end{cases}$$

ʋ ʈʃtets ʘ, ʈʃtsdẑʋɕdʒ

$$\begin{cases} x_1' = (x_1 + 1/3x_2)(x_1 + 2/3x_2 + 1/3x_3) \\ x_2' = (x_1 + 1/3x_2)(x_4 + 2/3x_3 + 1/3x_2) + 2/3(x_2 + x_3)(x_1 + 2/3x_2 + 1/3x_3) \\ x_3' = (x_4 + 1/3x_3)(x_1 + 2/3x_2 + 1/3x_3) + 2/3(x_2 + x_3)(x_4 + 2/3x_3 + 1/3x_2) \\ x_4' = (x_4 + 1/3x_3)(x_4 + 2/3x_3 + 1/3x_2) \end{cases} \quad (1.2.8)$$

Y ŀstsʙ tsʈʃteʲ ʜʲ dẑɕŀs ʋɕʘfiŀstsŀs Gĵ dẑsŀsɕʃtʃtsə ə fiŋdẑ ʜɮ ʲ dʒ ʈʃtsʕtsdẑ dẑɕ, ə (1.2.8) dẑ tsʙ tsʜɕdʒs ʈʃtsʜfiŀsʘəɕŀs x_1', x_2', x_3', x_4' ədʒ fiŀsts x_1, x_2, x_3, x_4 fiŋtsŀsəʲ ŀsfiŀsəʲ dẑdẑs, ŀsʲ. ʈʃtsdẑʋɕdʒ ɮteʘədẑ dẑʃ

$$\begin{cases} x_1'' = (x_1' + 1/3x_2')(x_1' + 2/3x_2' + 1/3x_3') \\ x_2'' = (x_1' + 1/3x_2')(x_4' + 2/3x_3' + 1/3x_2') + 2/3(x_2' + x_3')(x_1' + 2/3x_2' + 1/3x_3') \\ x_3'' = (x_4' + 1/3x_3')(x_1' + 2/3x_2' + 1/3x_3') + 2/3(x_2' + x_3')(x_4' + 2/3x_3' + 1/3x_2') \\ x_4'' = (x_4' + 1/3x_3')(x_4' + 2/3x_3' + 1/3x_2') \end{cases} \quad (1.2.9)$$

ɕdẑɕ, ʈʃtsʜfiŀsʘəʣ ə (1.2.9) ə teʘʲ dẑʃ (1.2.8) tsʕtsdẑʘŀsʲ dẑ dẑs ɕdʒʲ dʒ

$$
\begin{cases}
x_1^{''} = 1/3(x_1 + 1/3x_2)(x_1 + 2/3x_2 + 1/3x_3) + 2/3(x_1 + 2/3x_2 + 1/3x_3)^3 \\
x_2^{''} = 1/3(x_1 + 1/3x_2)(x_4 + 2/3x_3 + 1/3x_2) + 2/9(x_2 + x_3)(x_1 + 2/3x_2 + 1/3x_3) + \\
\quad + 2(x_1 + 2/3x_2 + 1/3x_3)^2(x_4 + 2/3x_3 + 1/3x_2) \\
x_3^{''} = 1/3(x_4 + 1/3x_3)(x_1 + 2/3x_2 + 1/3x_3) + 2/9(x_2 + x_3)(x_4 + 2/3x_3 + 1/3x_2) + \\
\quad + 2(x_1 + 2/3x_2 + 1/3x_3)(x_4 + 2/3x_3 + 1/3x_2)^2 \\
x_4^{''} = 1/3(x_4 + 1/3x_3)(x_4 + 2/3x_3 + 1/3x_2) + 2/3(x_4 + 2/3x_3 + 1/3x_2)^3
\end{cases}
$$

[illegible] n [illegible]

$$
\begin{cases}
x_1^{(n+1)} = 1/3^n(x_1 + 1/3x_2)(x_1 + 2/3x_2 + 1/3x_3) + \\
(3^n - 1)/3^n(x_1 + 2/3x_2 + 1/3x_3)^3 \\
x_2^{(n+1)} = 1/3^n(x_1 + 1/3x_2)(x_4 + 2/3x_3 + 1/3x_2) + 2/3^{n-1}(x_2 + x_3)(x_1 + 2/3x_2 + 1/3x_3) + \\
\quad + (3^n - 1)/3^{n-1}(x_1 + 2/3x_2 + 1/3x_3)^2(x_4 + 2/3x_3 + 1/3x_2) \\
x_3^{(n+1)} = 1/3^n(x_4 + 1/3x_3)(x_1 + 2/3x_2 + 1/3x_3) + 2/3^{n+1}(x_2 + x_3)(x_4 + 2/3x_3 + 1/3x_2) + \\
\quad + (3^n - 1)/3^{n-1}(x_1 + 2/3x_2 + 1/3x_3)(x_4 + 2/3x_3 + 1/3x_2)^2 \\
x_4^{(n+1)} = 1/3^n(x_4 + 1/3x_3)(x_4 + 2/3x_3 + 1/3x_2) + (3^n - 1)/3^n(x_4 + 2/3x_3 + 1/3x_2)^3
\end{cases}
$$

[illegible] $n \to \infty$ [illegible]

$$\lim_{n\to\infty} x_1^{\infty} = (x_1 + 2/3x_2 + 1/3x_3)^3$$

$$\lim_{n\to\infty} x_2^{(n)} = 3(x_1 + 2/3x_2 + 1/3x_3)^3(x_4 + 2/3x_2 + 1/3x_3)$$

$$\lim_{n\to\infty} x_3^{(n)} = 3(x_1 + 2/3x_2 + 1/3x_3)(x_4 + 2/3x_3 + 1/3x_3)^2$$

$$\lim_{n\to\infty} x_4^{(n)} = (x_4 + 2/3x_3 + 1/3x_2)^3$$

[illegible] (02) [illegible], [illegible] (0,1,0,0) [illegible] (0,0,1,0) [illegible], [illegible]. [illegible]

[illegible]

[illegible] 1.2.1. [illegible] $\tilde{V}_{\alpha}$, [illegible], [illegible] $\alpha = 1$ [illegible] $n = 1$ [illegible] $n = 2$, [illegible] $n = 3$ [illegible].

[illegible], [illegible], [illegible] $x^{(k+1)}$ [illegible].

[illegible] 1.2.2. [illegible] $\tilde{V}_{\alpha}$ [illegible] $\alpha = 1$ [illegible] $n = 3$ [illegible] $x^{(k)}$ [illegible] $k \to \infty$ [illegible].

[illegible] 1.2.3. [illegible] $\tilde{V}_{\alpha}$ [illegible] $\alpha = 1$ [illegible] $n = 1$ [illegible] $n = 2$ [illegible] $n = 3$ [illegible]

[illegible]

1. [illegible] [illegible], 1924, [illegible] I, [illegible] 83-115.

2. [illegible] 1969. 168 [illegible]

3. [illegible] 1977 [illegible] 127 [illegible]

4. [illegible] .// [illegible], 1987 [illegible] 300 [illegible]