

① Calcul de la série $S = 1 + \frac{x}{a_1} + \frac{x^2}{a_2} + \dots$ à $\Delta S = 2^{-\alpha}$

où $x = \langle A_0 \rangle = (\alpha, X) = 2^{-\alpha} X$

et où $a_i \in \mathbb{N}$ est mis dans $[A2]$ par $\left\{ \begin{array}{l} \text{MOVE \#i, D0} \\ \text{JSR (A3)} \end{array} \right.$

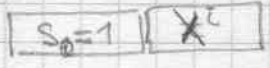
Sort $[A2] = 2^\alpha S$

XSERIE: MOVEM.L A0/A3/A6, -(SP)

MOVE (A0), D1 α

BSR XXP2N $2^\alpha [S_0=1]$

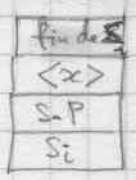
MOVE.L A6, -(SP)



MOVE.L A0, A2 X utilisé pour X^i

CLR.L -(SP) $i=0$

BRA KL78



KL76: MOVEM.L (SP), D0/A0/A1
 $X^i \quad \langle x \rangle$

ADDQ #2, A1 x

BSR XMULS1 $A2 = X^{i+1} 2^\alpha$

MOVEM.L (SP), D3/A2/A3

MOVE (A3), D2 α

BSR XORR $A2 = X^{i+1}$

KL78: ADDQ.L #1, (SP) $i = i+1$



(1)

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x KL77: CMP #4000, (A2)      A2 = X^{i+1}
      BEQ  KL81              → fin

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      MOVEM.L (SP), D0/A0/A1/A3
                        i         SP

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      MOVE.L A2, -(SP)

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X^{i+1}

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      JSR  (A3)              met a_i = [A1]
      MOVE.L A2, A1

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      MOVE.L (SP), A0      X^{i+1}

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      BSR  XDIVAR           [A2] ≈ X^{i+1}/a_i

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      CMP  #4000, (A2)

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x      BEQ  KL80              → fin

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      MOVEM.L 16(SP), D0, A1
      KL79: MOVE.L A2, A0

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      BSR  XADDSY           S_i + X^{i+1}/a_i

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      MOVE.L (SP)+, A0     X^{i+2} [ou X^{i+1}/a_{i+1}]

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      MOVE.L A2, -(SP)

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      BSR  XPOSE           copie X^{i+1}

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      MOVE.L (SP)+, A1     S_{i+1}

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      MOVE.L 16(SP), A0    ancien S_i

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      MOVEM.L A2/A6, -(SP) ← { MOVE.L A2, A6
                             { MOVE.L A1, A2

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      BSR  XLB76

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      MOVEM.L (SP)+, A2/A6

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      MOVE.L A0, 4(SP)     nouveau X^i = X^{i+1}

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      BSR  XLB76

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      BRA  KL76

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      KL80: ADDQ #4, SP

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      KL81: MOVEM.L (SP)+, D3/A6 → fin

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      MOVE.L (SP)+, A0/A1/A2
                        S_{i+1}

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      RTS

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