Table III

Relationship of the fine-structure-like approximation (α) to the Fibonacci Numbers Sequence

x by	0.7236292487	rounded to whole number	Fibonacci Number Sequence, ≥1	0.72973525664	rounded to whole number	0.7236067977	rounded to whole number	reciprocal of 0.7236067977 =—>	1.381966011
ϕ	1.17086	1	**1**	1.1807364480	1	1.1708203932	**1**		
ϕ^{2}	1.89449	2	**2**	1.91047	2	1.8944	**2**		
ϕ^{3}	3.06534	3	**3**	3.09120	3	3.0652	**3**		
ϕ^{4}	4.95983	5	**5**	5.0017	5	4.9597	**5**		
ϕ^{5}	8.02517	8	**8**	8.0929	8	8.0249	**8**		
ϕ^{6}	12.98500	13	**13**	13.09456	13	12.9846	**13**		
ϕ^{7}	21.01017	21	**21**	21.18745	21	21.0095	**21**		
ϕ^{8}	33.99517	34	**34**	34.2820	34	33.9941	**34**		
ϕ^{9}	55.00534	55	**55**	55.4695	55	55.0036	**55**		
ϕ^{10}	89.00051	89	**89**	——>89.7515	90	88.9978	**89**		
ϕ^{11}	144.00586	144	**144**			144.0014	**144**		
ϕ^{12}	233.00637	233	**233**			232.9991	**233**		
ϕ^{13}	377.0122	377	**377**			377.0005	**377**		
ϕ^{14}	610.018	610	**610**			609.9997	**610**		
ϕ^{15}	987.031	987	**987**			987.0002	**987**		
ϕ^{16}	1,597.049	1597	**1597**			1,596.9999	**1597**		
ϕ^{17}	2,584.080	2584	**2584**			2,584.0001	**2584**		
ϕ^{18}	4,181.13	4181	**4181**			4,180.9999	**4181**		
ϕ^{19}	6,765.21	6765	**6765**			6,765.0	**6765**		
ϕ^{20}	10,946.34	10946	**10946**			10,945.9999	**10946**		
ϕ^{21}	17,711.55	——>17712	**17711**			17,711.0	**17711**		
ϕ^{22}	28,657.89	28658	**28657**			28,656.9999	**28657**		
ϕ^{23}	46,369.44	46369	**46368**			46,368.0	**46368**		
ϕ^{24}	75,027.33	75027	**75025**			75,024.9999	**75025**		
ϕ^{25}	121,396.77	121397	**121393**			121,393.0	**121393**		
ϕ^{26}	196,424.09	196424	**196418**			196,417.9999	**196418**		
ϕ^{27}	317,820.86	317821	**317811**			317,811.0	**317811**		
ϕ^{28}	514,244.95	514245	**514229**			514,228.9999	**514229**		
ϕ^{29}	832,065.82	832066	**832040**			832,040.0	**832040**		
ϕ^{30}	1,346,310.77	1346311	**1346269**			1,346,268.9999	**1346269**		
ϕ^{31}			**2178309**			2,178,309.0	**2178309**		
ϕ^{32}			**3524578**			3,524,577.9999	**3524578**		
ϕ^{33}			**5702887**			5,702,887.0	**5702887**		
ϕ^{34}			**9227465**			9,227,464.9999	**9227465**		
ϕ^{35}			**14930352**			14,930,352.0	**14930352**		
ϕ^{36}			**24157817**			24,157,816.9999	**24157817**		
ϕ^{37}			**39088169**			39,088,169.0	**39088169**		
ϕ^{38}			**63245986**			63,245,985.9999	**63245986**		
ϕ^{39}			**102334155**			102,334,155.0	**102334155**		
ϕ^{40}			**165580141**			165,580,140.9999	**165580141**		
ϕ^{41}			**267914296**			267,914,296.0	**267914296**		
ϕ^{42}			**433494437**			433,494,436.9999	**433494437**		
ϕ^{43}			**701408733**			701,408,733.0	**701408733**		
ϕ^{44}			**1134903170**			1,134,903,169.9999	**1134903170**		
ϕ^{45}			**1836311903**			1,836,311,903.0	**1836311903**		
ϕ^{46}			**2971215073**			2,971,215,072.9999	**2971215073**		
ϕ^{47}			**4807526976**			4,807,526,976.0	**4807526976**		
ϕ^{48}			**7778742049**			7,778,742,049.0	**7778742049**		
ϕ^{49}			**12586269025**			12,586,269,025.0	**12586269025**		
ϕ^{50}			**20365011074**			20,365,011,074.0	**20365011074**		

Table III

$\phi = 1.61803$ $\sqrt[3]{\phi} = 1.174 = \gamma$ $\gamma^3 = 1.174^3 = \phi$ $\boldsymbol{\alpha} = \gamma^2 = 1.3782$ $\gamma = \phi/\boldsymbol{\alpha} = 1.61803/1.3782 = 1.1739$

These are the original phi (ϕ), $\boldsymbol{\alpha}$ and γ relationships found in the DNA Master Chart.

NOTE: In all references to the early DNA triangle work, $\boldsymbol{\alpha}$ should be correctly designated $\boldsymbol{\alpha}^{-1}$. Back in 2001, the $\boldsymbol{\alpha}$ was used as $\boldsymbol{\alpha} = 1.3782$ when in fact it is the reciprocal of $\boldsymbol{\alpha}$, as $\boldsymbol{\alpha} = 1/137$, thus $\boldsymbol{\alpha}^{-1}$ *is, from this current work on, correctly used as* $\boldsymbol{\alpha} = 0.72$……..

The differences in $\boldsymbol{\alpha}$-like numbers are below.

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Below, corresponding to three slightly different iterations of $\sqrt{\alpha^{-1}} = \gamma$ as seen in Columns 1,2 — Columns 4,5 — Columns 6,7

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Column 1

Reciprocal of $\boldsymbol{\alpha}^{-1} = 1.3819$ as $\boldsymbol{\alpha} = 0.7236292487$ taken from working down Fibonacci Number 89 (Table I)— dividing each Fibonacci number sequentially by ϕ.

Working from the 0.7236292487 on up — multiplying sequentially by ϕ — only works up to 10946 before becoming too large. Col 1,2

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Column 4

Reciprocal of the published fine-structure constant = $\boldsymbol{\alpha}^{-1} = 137.035999139(31)$ as $\boldsymbol{\alpha} = 0.0072973525664(17)$.

Working from the 0.72973525664 on up — multiplying sequentially by ϕ — only works up to 55 before becoming too large. Col 4,5

Reference: https://en.wikipedia.org/wiki/Fine-structure_constant

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Column 6

Reciprocal of the natural fitting 0.7236067977 = 1/1.3819660113

Working from the 0.7236067977 on up — multiplying sequentially by ϕ — works perfectly at least up to 20,365,011,074. Col 6,7

$1.3819660113 \times 1.17082 = 1.6180334454$ $1.17082^2 = 1.3708194724$ $1.17082^3 = 1.6049828547$

Here we see that this nearly "perfect" fit $\boldsymbol{\alpha} = 0.7236067977 = 1/1.38196601$ completely re-generates the Fibonacci Numbers Sequence.

As, $\boldsymbol{\alpha}^{-1} = 1/\boldsymbol{\alpha}$ and $(1/\boldsymbol{\alpha})\phi = \phi$, so $1.3819660113 \times 1.17082 = 1.6180334454$ and $\gamma^2 = \boldsymbol{\alpha}^{-1}$ ***, so*** $1.17082^2 = 1.3708$

Less perfect, than the original DNA Triangle values (see above), is $1.17082^3 = 1.6049828547$ — NOT quite ϕ.

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Clearly, these numbers are close — very close — to defining a definitive connection between the Phi (ϕ), the Fibonacci Number Sequence, the pentagon, the Kepler Triangle, the Pythagorean Triples, the DNA double-helix molecule, and perhaps even the fine-structure constant. Tweaking the values slightly one way satisfies some sets, but not all. Tweaking the values a little the other way satisfies those sets outside, but sacrifices some of the formerly included sets. It may also be simple a matter of scale, i.e. molecular versus atomic. On the level of physics, and their constants, one would prefer a more definitive connection. On the level of biology — even though physics informs the chemistry that informs the biology — we can appreciate how the template of the perfect match may enjoy the fruits of diversity by exactly that type of subtle variation from an exact fit!
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