

Phi Ratio Harmonies – RePhiNing PyraLight

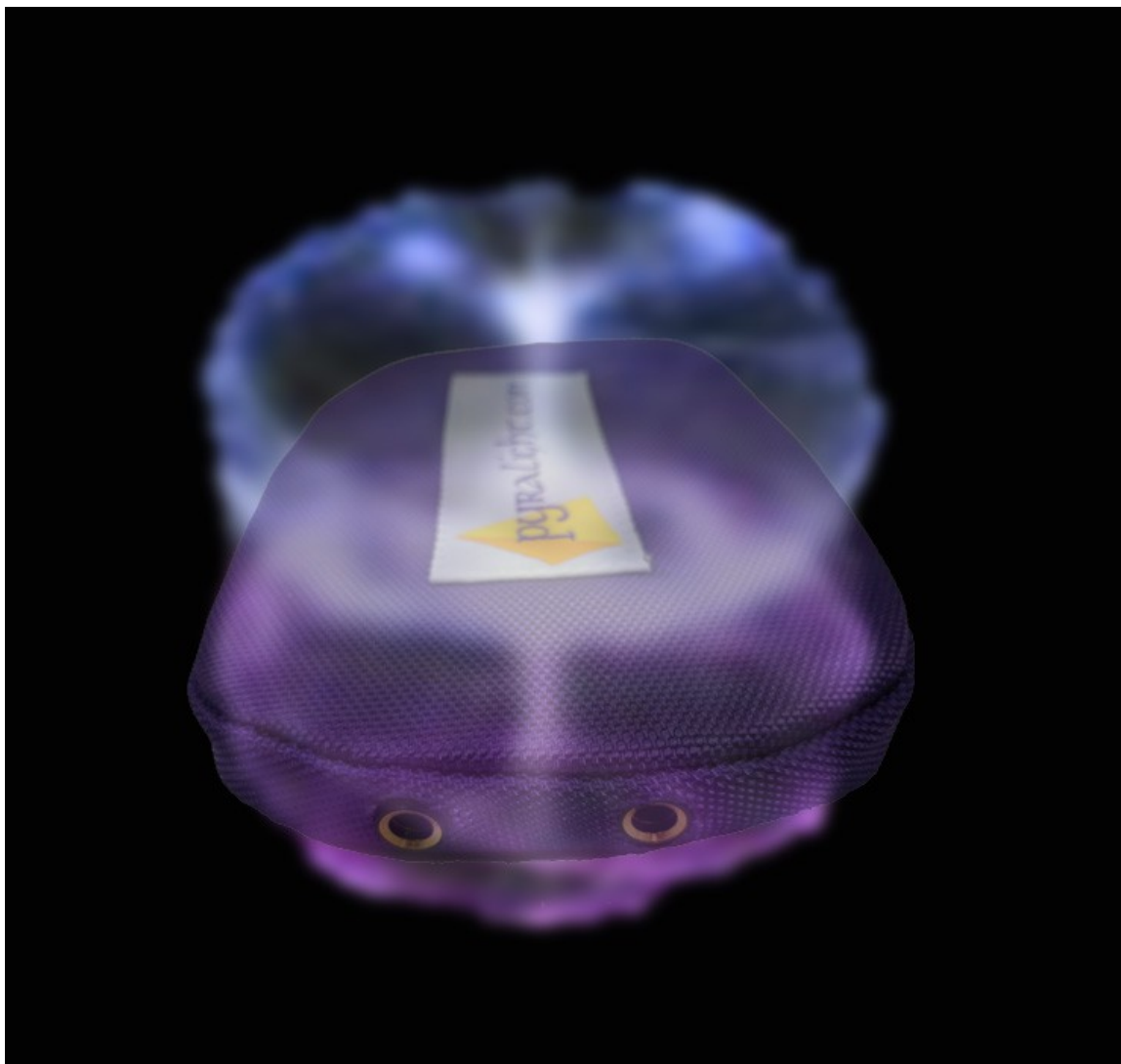
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The fractal nature of the universe and the ubiquity of the Phi ratio in nature is well known. Although 20th century science has been restricted to materialism and atomism, and it's ignoring of consciousness, there is now a resurgence of the understanding of ancient wisdom in physics.

The Phi ratio, or Golden Mean, describes the logarithmic spiral found throughout nature, and which is also the vortexing magnetic field measured around the PyraLight. The measured magnetic field from the pad is about 90% in the Z axis, vertical to the pad. This spiraling pulsed magnetic is a longitudinal wave, whereas the toroidal field in the X and Y axis is transverse field. The PyraLight uses the superpulsed frequencies to entrain the user's entire body system with this magnetic field as well as 6 x 3W IR LEDs in the pad. The pad output can also drive external passive pads and a 650nm nasal laser light.



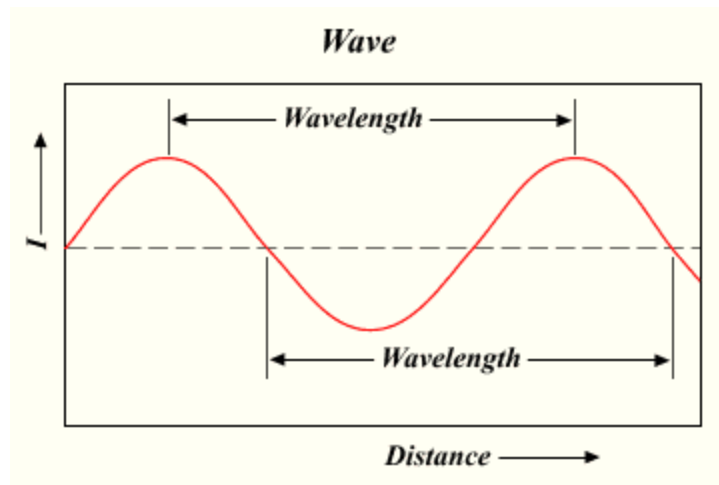
Sound is a longitudinal pressure wave in air. Sound is a powerful entrainer of the brain, operating mostly through the primitive parts of the brain. The PyraLight does not incorporate music, and the user is free to use no music or whichever music they choose during a session. As I am aware of Dan Winter's work on fractality and Phi, I looked at his formula expressing this relationship:

$$\text{fractal wavelength} = \text{Planck's constant} \times \text{Phi}^N$$

$$\text{Frequency} = \frac{\text{Velocity}}{\text{Wavelength}}$$

$$f = \frac{v}{\lambda}$$

Unit of Frequency: Hz



Planck's constant is the smallest length (1.616×10^{-35}) at which matter can begin to emerge from the Field (zero point energy, counterspace, or Ether are some of the names used for it). Planck's length is a constant throughout the universe, and is the smallest measurable size observable.

The fractal nature of the equation shows up in wavelengths for integer values of N. Red light, blue light, the diameter of the hydrogen atom and the foot (30.3cm) are examples of frequencies which fit into the series of Phi^N values. The orbital time period of some planets also are close to the periods of Phi^N waves.

The table at the end of the document shows the results of the wavelength equation in terms of light and sound, with N in the range of 130 to 255.

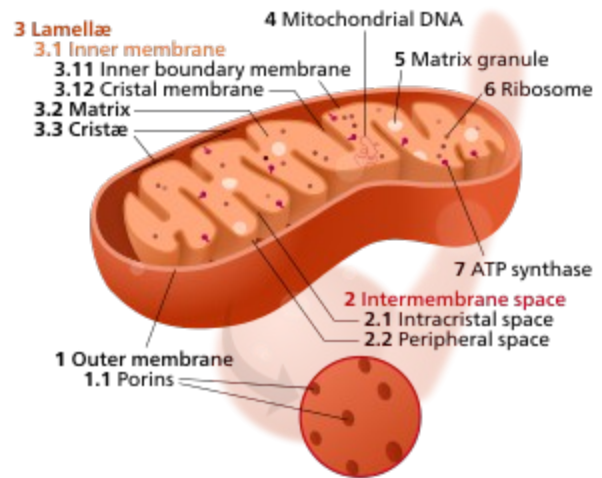
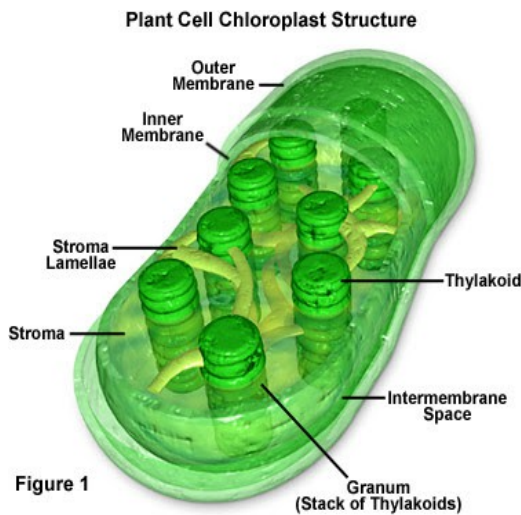
Here are some examples of values of N which correspond to natural phenomena.

Physiology and Phi^N

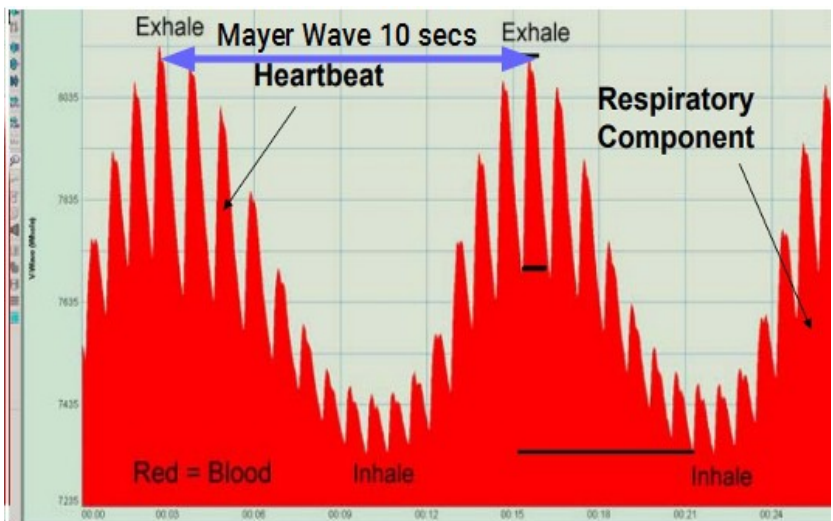
N = 136 wavelength 426nm blue peak absorption for chlorophyll photosynthesis
 N = 137 wavelength 689nm red peak absorption for chlorophyll photosynthesis and mitochondrial cytochrome C oxidase activation (650nm and 850nm are both peaks)

Photosynthesis: Chlorophyll causes photosynthesis and absorbs blue light of 430nm and red light of 662nm. It reflects green light, so that plants appear green.

Mitochondrial Metabolism: Cytochrome C oxidase is the precursor to the ATP synthase enzyme in ATP synthesis.



Heart Rate Variability is the breath-related change in heart rate which can be measured and analyzed for determining heart health as well as the meditative state. If there is no variability that is an indication of an impending stroke. Our physiology runs optimally if the HRV cycle is 10 seconds per breath, or 0.1Hz. This frequency is called the Mayer wave in medicine. At N=212, the fractal Phi frequency is 0.09Hz, so the Mayer wave is Phi^N fractal.



Sound and Phi^N

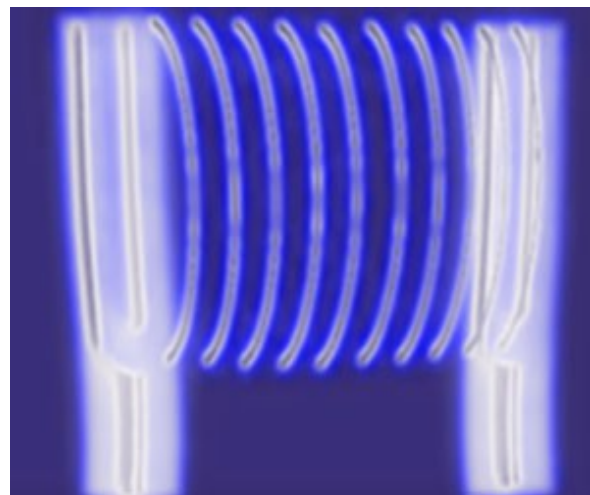
N = 166 sound frequency = 432.93Hz 432Hz was the natural tuning of the note A before the 440Hz standard was adopted by the BSI in 1939. 432Hz is preferred for natural music.

N = 171 sound frequency = 39.0Hz 39Hz is one of the set of Schumann frequencies. At 40Hz gamma EEG, the two hemispheres are integrated together.

N = 177 sound frequency = 2.18Hz 2Hz is the center of the delta (deep sleep and meditation) EEG band

The Phi ^N fractal frequencies in the audio range are:

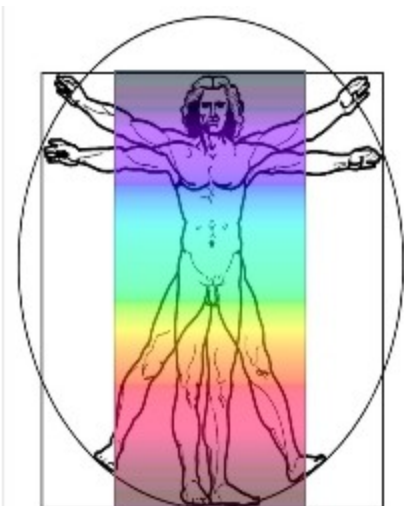
N = 170	63Hz
N = 169	102Hz
N = 168	165Hz
N = 167	268Hz
N = 166	432Hz
N = 165	700Hz
N = 164	1133Hz
N = 163	1834Hz
N = 162	2967Hz
N = 161	4800Hz
N = 160	7767Hz
N = 159	12568Hz



The RePhiNed audio files, released as free mp3 downloads, reinforce the entrainment for the Phi fractal PyraLight pad as the tones used for RePhiNed music is made up only of these Phi ratio frequencies, as well as beat frequencies around them related to the PyraLight superpulsed frequencies.

EEG	Chakra	N	Frequency	PyraLight
Gamma	7	171	39Hz	40Hz
Beta/Gamma	6	172	24Hz	
Beta	5	173	15Hz	
Alpha	4	174	9Hz	8Hz
Theta	3	175	6Hz	
Delta/Theta	2	176	4Hz	
Delta	1	177	2Hz	2Hz

The PyraLight superpulses 2Hz, 8Hz, and 40Hz, which is very close to N=177, N=174 and N=171.



The Phi^N fractal tones in the RePhiNed music are resonances which are Phi^N extensions of the PyraLight pad frequencies. These three videos and mp3s can be used with the PyraLight pad, and headphones are ideal for experiencing the beat frequencies. It is recommended that the PyraLight nasal light is used at the same time. The magnetic and IR signals from the pad are gentle and safe, and the music tracks are all 90 minutes, so it is easy to experience a long and deep PyraLight meditation session.



PyraLight RePhiNed nature

<https://youtu.be/BntpaFJqleo>

Phi ratio fractal music to enhance your PyraLight.com pad session. Use it with the nasal cord for added benefits. These frequencies are all Phi^N multiples of...



PyraLight RePhiNed psychedelic

<https://youtu.be/-UHY7KuNg90>

Phi ratio fractal music to enhance your PyraLight.com pad session. Use it with the nasal cord for added benefits. These frequencies are all Phi^N multiples of...



PyraLight RePhiNed calm, relaxed

https://youtu.be/F_Wqo6q33K4

Phi ratio fractal music to enhance your PyraLight.com pad session. Use it with the nasal cord for added benefits. These frequencies are all Phi^N multiples of...



[PyraLight RePhiNed nature.mp3](#)

[PyraLight RePhiNed psychedelic.mp3](#)

[PyraLight RePhiNed calm relaxed.mp3](#)

Physical Dimensions and Phi^N

N = 164 wavelength 0.3026m 30.26cm one foot = 30.48cm
N = 166 wavelength 0.7922m 79.22cm one megalithic yard = 83cm

The megalithic yard is measured using the transit of Venus at the equinox dawn and was used in 600 megaliths throughout Europe as it was easy to calibrate locally.

Other old units of measurement such as the cubit, yard, and mile are not close to Phi^N.

Solar System and Phi^N



N = 240	period = 7,694,214 seconds	orbital period of Mercury is 7,600,000 seconds
N = 242	period = 20,142,867 seconds	orbital period of Venus is 19,400,000 seconds
N = 243	period = 32,591,159 seconds	orbital period of Earth is 31,600,000 seconds
(N = 244	period = 52,732,495 seconds	orbital period of Mars is 59,400,000 seconds)
N = 248	period = 361,403,527 seconds	orbital period of Jupiter is 370,000,000 seconds
N = 250	period = 946,126,966 seconds	orbital period of Saturn is 930,000,000 seconds
(N = 254	period = 6,484,305,828 seconds	orbital period of Pluto is 7,810,000,000 seconds)
(N = 255	period = 10,491,606,830 seconds	orbital period of Neptune is 8,200,000,000 seconds)

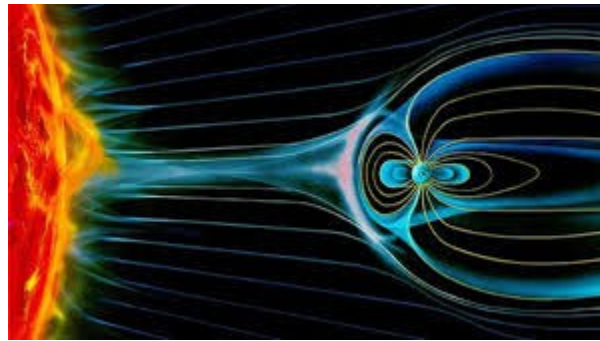
So five out of the eight planets have orbital periods close to the Phi^N period, with Mars, Pluto and Neptune being part way between Phi^N fractal periods.

Greek and Roman Mythology of Planets: The three planets which have orbital periods which are not Phi^N fractal are three more aggressive gods: Mars (Greek Ares) is the god of war; Neptune (Greek Poseidon) is the god of the ocean and storms, threatening to sailors, he carries the trident of the Hindu god of destruction Shiva; and Pluto (Greek Hades) is the god of death and the underworld. These planets have a heavily Yang aspect in mythology.

So we can conclude that the five Yin planets Mercury, Venus, Earth, Jupiter and Saturn which

are seen as positive and beneficial influences. They are fractal in Φ^N . The three Yang planets Mars, Neptune and Pluto are seen as negative and are not fractal in Φ^N .

Recently discovered by NASA, there are periodic magnetic portals between the Sun and Earth's magnetic fields, creating a direct path between them. Portals are cylinder-shaped and terminate about 32,000 kilometers above Earth. Approximately every 8 minutes a portal opens up and the Sun and Earth fields connect. This period varies, but is observed to average 8 minutes. The period of 8 minutes is 480 seconds. This period is the frequency 0.0021Hz.



Additionally, light takes an average of 8 minutes and 20 seconds (total 500 seconds, frequency 0.002Hz) to travel from the Sun to the Earth. There may be an oscillating relationship between the solar light wave propagation and the solar magnetic plasma portal pulses as their periods are so similar. Both frequencies are very close to the light frequency for $N=220$, which is 0.0197Hz, a period of 508 seconds. So these solar phenomena are Φ fractal to Planck length as well.

The Hebrew tradition of the Golden Jubilee, in which all debts were forgiven every 49 years, prevented exponential debt increase which happens with fiat currencies. For $N=251$, Φ^N fractal period is 1,531,000,000 seconds, and 49 years is 1,545,000,000 seconds, so 49 years is Φ^N fractal. This connection to the natural fractal time periods may be the reason for 49 years being chosen for the Golden Jubilee, and is 7×7 years, a significant number in nature. Every seventh year in the Golden Jubilee is called a Sabbatical year.

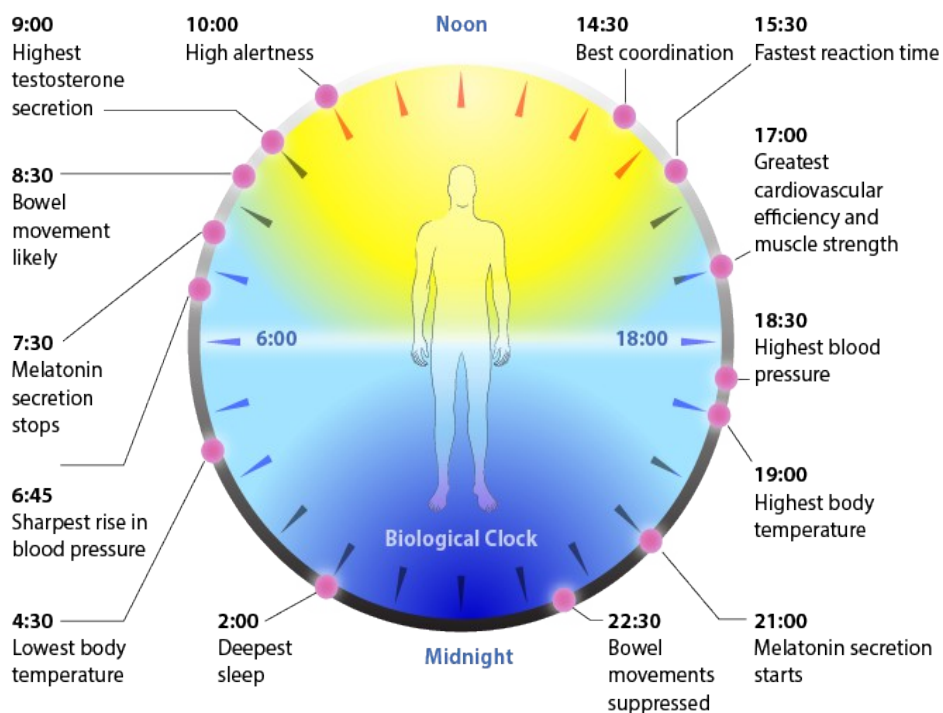
Seven years is also Φ^N fractal, with $N=247$, the period being 223,000,000 seconds. Seven years in seconds is 221,000,000 seconds. Traditionally, childhood development is described in 7 year cycles, completing at 28 years after 4 cycles. This is the time of the "Saturn return" cycle of approximately 28 years, when Saturn returns to the same relative position as when the baby was born. Saturn's orbital period of 29 years is the average time, but its eccentric orbit means the Saturn return for different birth dates ranges from 28-31 years. For $N=250$, the period of 946,000,000 seconds is 30.0 years. Saturn's orbit is Φ^N fractal.

A quarter year is 90 days, marking the solstices and equinoxes. For $N=240$, the fractal period is 76,900,000 seconds, which is 89 days. The quarter year as well as the full Earth year are Φ^N fractal.

The Mayan Tzolkin cycle is 20 periods of 13 days, making 260 days. 13 days is 1123000 seconds and fractal period $N=236$ is 1123665 seconds, so the Tzolkin is Φ^N fractal.

Rhythms of Nature and Fractal Phi^N

The fractality of nature represented by these Phi^N phenomena indicates that the frequencies in and below the audio range in this series are significant to our physiology, circadian rhythms, neurology, thinking, feelings and emotions, and therefore to our state of consciousness. The fractal frequencies of the PyraLight pad are particularly helpful in restoring high quality sleep when used under the pillow overnight and avoiding jet lag.

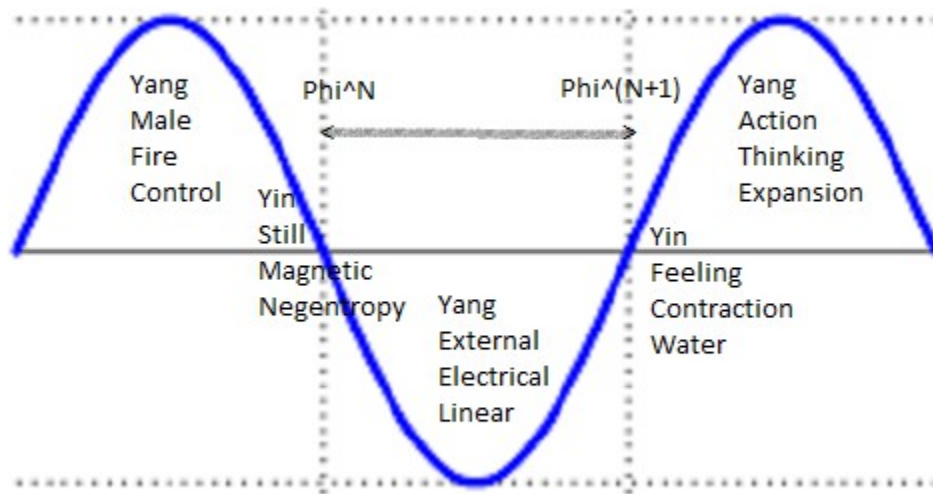


The twelve meridians are turned on sequentially during the day and night, each active for 2 hours, causing physiological processes of the body to activate in sequence. Two hours is 120 seconds, which is exactly Phi^N fractal for N=217 (period = 120.13 seconds).

The PyraLight pad operates by entraining the body's natural cycles using fractal Phi^N frequencies below audible sound of N=171 (40Hz), N=174 (8Hz) and N=172 (2Hz). They are Phi fractal to the N=121 meridian clock period, reinforcing it as well as Mayer wave N=212. The PyraLight therefore increases fractal resonance in the body, tuning and locking it into the body's natural cycles.

Delivering these PyraLight fractal frequencies is enhanced using a passive pad running from the active pad which generates the control signal. Additionally the 650nm double nasal laser, with the PyraLight RePhiNed mp3s further reinforce the entertainment to circadian and other physiological cycles.

All these cycles are sine waves. Looking at the frequencies which are fractal at the midpoint of the sinewave, it is possible to observe the electrical and magnetic characteristics of the entire range of electromagnetic frequencies. The still, magnetic or zero point frequencies are the ones with are integer N in the Planck's length x Phi^N series.



Yang and Yin extremes correspond to points of maximum expansion and compression of the sinewave.

When seen in 3D, the rotating sinewave forms a vortex from the maximum expansion of the Yang extreme to the maximum compression of the Yin extreme. The sinewave spiraling in 3D cycles from expansion to compression then expansion then compression.



Light and Fractal Phi^N

The Tibetan tradition has a fundamental concept of the Rainbow Light Body. The seven colors of the rainbow correspond to the seven chakras in yoga. In Taoist philosophy, the chakras are grouped into three Dan Tien. The lower Dan Tien (Hara in Japanese) is the lower three chakras and is red to yellow. The middle Dan Tien is the heart chakra, and is green. The upper Dan Tien are the upper three chakras including the pineal or ajna chakra, called the celestial eye in Taoism, and is blue to violet.

Red and violet light and exact Planck length x Phi^N wavelengths.

The PyraLight pad correspondingly uses Phi^N longitudinal waves, with 40Hz balancing the upper Dan Tien, and the exact Phi^N fractal frequency of 2Hz balancing the lower Dan Tien.

The 8Hz Schumann frequency generated by the PyraLight is close to the Phi^N fractal frequency of 9Hz. Schumann has a number of other resonances, including Phi^N frequency of 39Hz, so the PyraLight directly re-harmonizes the body to the Earth's natural Phi^N frequencies in which we have developed.

Notice that green light is not a Phi^N number. In photosynthesis, red and violet light are taken in by the chlorophyll but green light is refracted back out, making plants have green leaves.



40Hz (39.0Hz N=171) violet 426nm N=136

8Hz (9Hz N=174) green

2Hz (2.18Hz N=177) red 689nm N=137

Pyralight frequencies are Phi fractal with rainbow light body chakra wavelengths

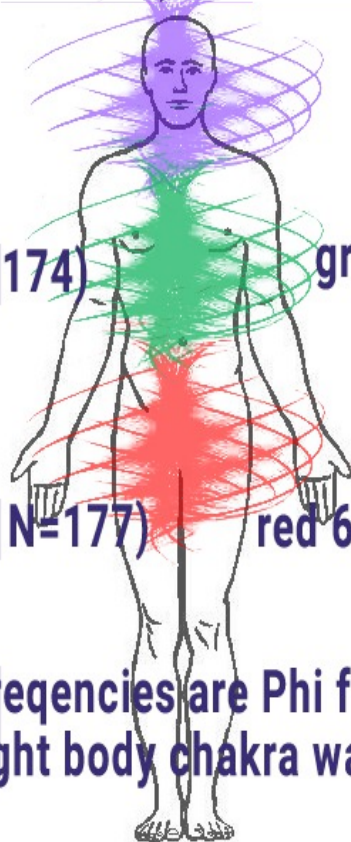


Table of Phi^N fractal frequencies for Light and Sound

Functions

<input checked="" type="checkbox"/>	$f(x) = (1.616 \cdot 10^{-35} \cdot 1.618^x)$	wavelength (meters)
<input checked="" type="checkbox"/>	$g(x) = 3 \cdot 10^8 / (1.616 \cdot 10^{-35} \cdot 1.618^x)$	frequency as light (Hz)
<input checked="" type="checkbox"/>	$h(x) = 1 / (3 \cdot 10^8 / (1.616 \cdot 10^{-35} \cdot 1.618^x))$	period as light (seconds)
<input checked="" type="checkbox"/>	$i(x) = 343 / (1.616 \cdot 10^{-35} \cdot 1.618^x)$	frequency as sound (Hz)

N	wavelength $f(x)$	frequency as light $g(x)$	period as light $h(x)$	frequency as sound
130	0.000000024	12,632,015,571,856,760.000000000	0.000000000	14,442,604,470.489562988
131	0.000000038	7,807,178,969,009,122.000000000	0.000000000	8,926,207,954.567096710
132	0.000000062	4,825,203,318,299,828.000000000	0.000000000	5,516,815,793.922803879
133	0.000000101	2,982,202,298,083,948.500000000	0.000000000	3,409,651,294.142647743
134	0.000000163	1,843,141,098,939,399.500000000	0.000000000	2,107,324,656.454046488
135	0.000000263	1,139,147,774,375,401.000000000	0.000000000	1,302,425,622.035875320
136	0.000000426	704,046,832,123,239.250000000	0.000000000	804,960,211.394236922
137	0.000000689	435,134,012,437,107.000000000	0.000000000	497,503,220.886425734
138	0.000001116	268,933,258,613,786.750000000	0.000000000	307,480,359.015096247
139	0.000001805	166,213,386,040,659.312500000	0.000000000	190,037,304.706487149
140	0.000002920	102,727,679,876,798.093750000	0.000000000	117,451,980.659139141
141	0.000004725	63,490,531,444,250.976562500	0.000000000	72,590,840.951260284
142	0.000007645	39,240,130,682,478.968750000	0.000000000	44,864,549.413634285
143	0.000012370	24,252,243,932,310.859375000	0.000000000	27,728,398.895942081
144	0.000020015	14,989,025,916,137.734375000	0.000000000	17,137,452.964117475
145	0.000032384	9,263,922,074,250.761718750	0.000000000	10,591,750.904893370
146	0.000052397	5,725,538,982,849.666992188	0.000000000	6,546,199.570391453
147	0.000084778	3,538,652,028,955.294921875	0.000000000	4,045,858.819772220
148	0.000137171	2,187,053,169,935.287109375	0.000000000	2,500,530.790959345
149	0.000221942	1,351,701,588,340.721435547	0.000000000	1,545,445.482669558
150	0.000359103	835,415,073,140.124267578	0.000000000	955,157.900290209
151	0.000581029	516,325,755,958.049560547	0.000000000	590,332.447645370
152	0.000940104	319,113,569,813.380493164	0.000000000	364,853.181486632
153	0.001521089	197,227,175,410.000244141	0.000000000	225,496.403885434
154	0.002461121	121,895,658,473.424133301	0.000000000	139,367.369521282
155	0.003982094	75,337,242,567.011199951	0.000000000	86,135.580668283

156	0.006443028	46,561,954,614.963668823	0.000000000	53,235.834776442
157	0.010424820	28,777,475,040.150592804	0.000000000	32,902.246462572
158	0.016867359	17,785,831,297.991710663	0.000000000	20,335.133784037
159	0.027291387	10,992,479,170.575841904	0.000000000	12,568.067851692
160	0.044157464	6,793,868,461.418937683	0.000000000	7,767.656274222
161	0.071446776	4,198,929,827.823817253	0.000000000	4,800.776436479
162	0.115600884	2,595,135,863.920776844	0.000000000	2,967.105337749
163	0.187042230	1,603,915,861.508514643	0.000000001	1,833.810468325
164	0.302634329	991,295,340.858167171	0.000000001	1,133.381006381
165	0.489662344	612,667,083.348681808	0.000000002	700.482698629
166	0.792273672	378,657,035.444179118	0.000000003	432.931210525
167	1.281898802	234,027,834.019888163	0.000000004	267.571823563
168	2.074112261	144,640,194.079040915	0.000000007	165.371955230
169	3.355913639	89,394,433.917825013	0.000000011	102.207636113
170	5.429868267	55,249,959.158111870	0.000000018	63.169119971
171	8.785526856	34,147,069.937028348	0.000000029	39.041483295
172	14.214982454	21,104,493.162563875	0.000000047	24.129470516
173	22.999841610	13,043,568.085638981	0.000000077	14.913146178
174	37.213743725	8,061,537.753794178	0.000000124	9.217024832
175	60.211837347	4,982,408.994928417	0.000000201	5.696554284
176	97.422752828	3,079,362.790437834	0.000000325	3.520738124
178	255.045362774	1,176,261.339304668	0.000000850	1.344858798
179	412.663396968	726,984.758531933	0.000001376	0.831185907
180	667.689376295	449,310.728388092	0.000002226	0.513711933
181	1,080.321410845	277,695.134974099	0.000003601	0.317498104
182	1,747.960042747	171,628.637190420	0.000005827	0.196228742
183	2,828.199349165	106,074.559450198	0.000009427	0.121278580
184	4,576.026546949	65,559.060228800	0.000015253	0.074955859
185	7,404.010952963	40,518.578633374	0.000024680	0.046326242
186	11,979.689721894	25,042.384816671	0.000039932	0.028631793
187	19,383.137970025	15,477.370096830	0.000064610	0.017695793
188	31,361.917235501	9,565.741716212	0.000104540	0.010936831
189	50,743.582087040	5,912.077698524	0.000169145	0.006759476
190	82,103.115816830	3,653.941717258	0.000273677	0.004177673
191	132,842.841391632	2,258.307612644	0.000442809	0.002581998
192	214,939.717371660	1,395.740180868	0.000716466	0.001595796
193	347,772.462707346	862.632991884	0.001159242	0.000986277
194	562,695.844660485	533.147708210	0.001875653	0.000609566
195	910,441.876660665	329.510326459	0.003034806	0.000376740
196	1,473,094.956436957	203.652859369	0.004910317	0.000232843
197	2,383,467.639514996	125.867032984	0.007944892	0.000143908
198	3,856,450.640735264	77.791738556	0.012854835	0.000088942
199	6,239,737.136709657	48.078948428	0.020799124	0.000054970
200	10,095,894.687196227	29.715048472	0.033652982	0.000033974
201	16,335,157.603883496	18.365295718	0.054450525	0.000020998
202	26,430,285.003083497	11.350615401	0.088100950	0.000012978

203	42,764,201.134989105	7.015213474	0.142547337	0.000008021
204	69,192,477.436412364	4.335731442	0.230641591	0.000004957
205	111,953,428.492115214	2.679685688	0.373178095	0.000003064
206	181,140,647.300242454	1.656171624	0.603802158	0.000001894
207	293,085,567.331792295	1.023591857	0.976951891	0.000001170
208	474,212,447.942839980	0.632627847	1.580708160	0.000000723
209	767,275,740.771515012	0.390993725	2.557585803	0.000000447
210	1,241,452,148.568311691	0.241652488	4.138173829	0.000000276
211	2,008,669,576.383528233	0.149352588	6.695565255	0.000000171
212	3,250,027,374.588549137	0.092306915	10.833424582	0.000000106
213	5,258,544,292.084272385	0.057050009	17.528480974	0.000000065
214	8,508,324,664.592352867	0.035259585	28.361082215	0.000000040
215	13,766,469,307.310426712	0.021792080	45.888231024	0.000000025
216	22,274,147,339.228275299	0.013468529	74.247157797	0.000000015
217	36,039,570,394.871345520	0.008324184	120.131901316	0.000000010
218	58,312,024,898.901855469	0.005144736	194.373416330	0.000000006
219	94,348,856,286.423202515	0.003179689	314.496187621	0.000000004
220	152,656,449,471.432739258	0.001965197	508.854831571	0.000000002
221	246,998,135,244.778198242	0.001214584	823.327117483	0.000000001
222	399,642,982,826.051147461	0.000750670	1,332.143276087	0.000000001
223	646,622,346,212.550781250	0.000463949	2,155.407820709	0.000000001
224	1,046,234,956,171.907226562	0.000286742	3,487.449853906	0.000000000
225	1,692,808,159,086.145996094	0.000177220	5,642.693863620	0.000000000
226	2,738,963,601,401.384765625	0.000109530	9,129.878671338	0.000000000
227	4,431,643,107,067.440429688	0.000067695	14,772.143690225	0.000000000
228	7,170,398,547,235.119140625	0.000041839	23,901.328490784	0.000000000
229	11,601,704,849,426.423828125	0.000025858	38,672.349498088	0.000000000
230	18,771,558,446,371.953125000	0.000015982	62,571.861487907	0.000000000
231	30,372,381,566,229.824218750	0.000009877	101,241.271887433	0.000000000
232	49,142,513,374,159.859375000	0.000006105	163,808.377913866	0.000000000
233	79,512,586,639,390.656250000	0.000003773	265,041.955464636	0.000000000
234	128,651,365,182,534.078125000	0.000002332	428,837.883941780	0.000000000
235	208,157,908,865,340.187500000	0.000001441	693,859.696217801	0.000000000
236	336,799,496,544,120.437500000	0.000000891	1,122,664.988480401	0.000000000
237	544,941,585,408,386.812500000	0.000000551	1,816,471.951361289	0.000000000
238	881,715,485,190,770.000000000	0.000000340	2,939,051.617302567	0.000000000
239	1,426,615,655,038,665.750000000	0.000000210	4,755,385.516795552	0.000000000
240	2,308,264,129,852,561.500000000	0.000000130	7,694,213.766175206	0.000000000
241	3,734,771,362,101,445.000000000	0.000000080	12,449,237.873671483	0.000000000
242	6,042,860,063,880,138.000000000	0.000000050	20,142,866.879600458	0.000000000
243	9,777,347,583,358,064.000000000	0.000000031	32,591,158.611193549	0.000000000
244	15,819,748,389,873,348.000000000	0.000000019	52,732,494.632911153	0.000000000
245	25,596,352,894,815,080.000000000	0.000000012	85,321,176.316050261	0.000000000
246	41,414,898,983,810,800.000000000	0.000000007	138,049,663.279369324	0.000000000
247	67,009,306,555,805,888.000000000	0.000000004	223,364,355.186019599	0.000000000
248	108,421,058,007,293,920.000000000	0.000000003	361,403,526.690979719	0.000000000
249	175,425,271,855,801,568.000000000	0.000000002	584,750,906.186005235	0.000000000
250	283,838,089,862,687,008.000000000	0.000000001	946,126,966.208956599	0.000000000
251	459,250,029,397,827,520.000000000	0.000000001	1,530,833,431.326091766	0.000000000
252	743,066,547,565,684,992.000000000	0.000000000	2,476,888,491.885616302	0.000000000
253	1,202,281,673,961,278,464.000000000	0.000000000	4,007,605,579.870928764	0.000000000
254	1,945,291,748,469,348,608.000000000	0.000000000	6,484,305,828.231162071	0.000000000
255	3,147,482,049,023,406,592.000000000	0.000000000	10,491,606,830.078022003	0.000000000