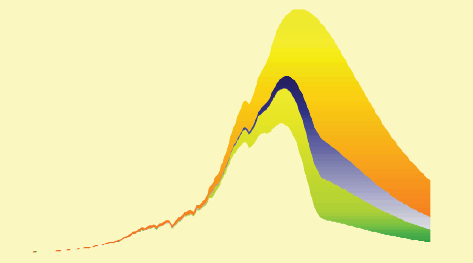


There is just ONE number to change to whatever number desired and the whole model will recalculate showing 'Phi' constant (chart on the right).

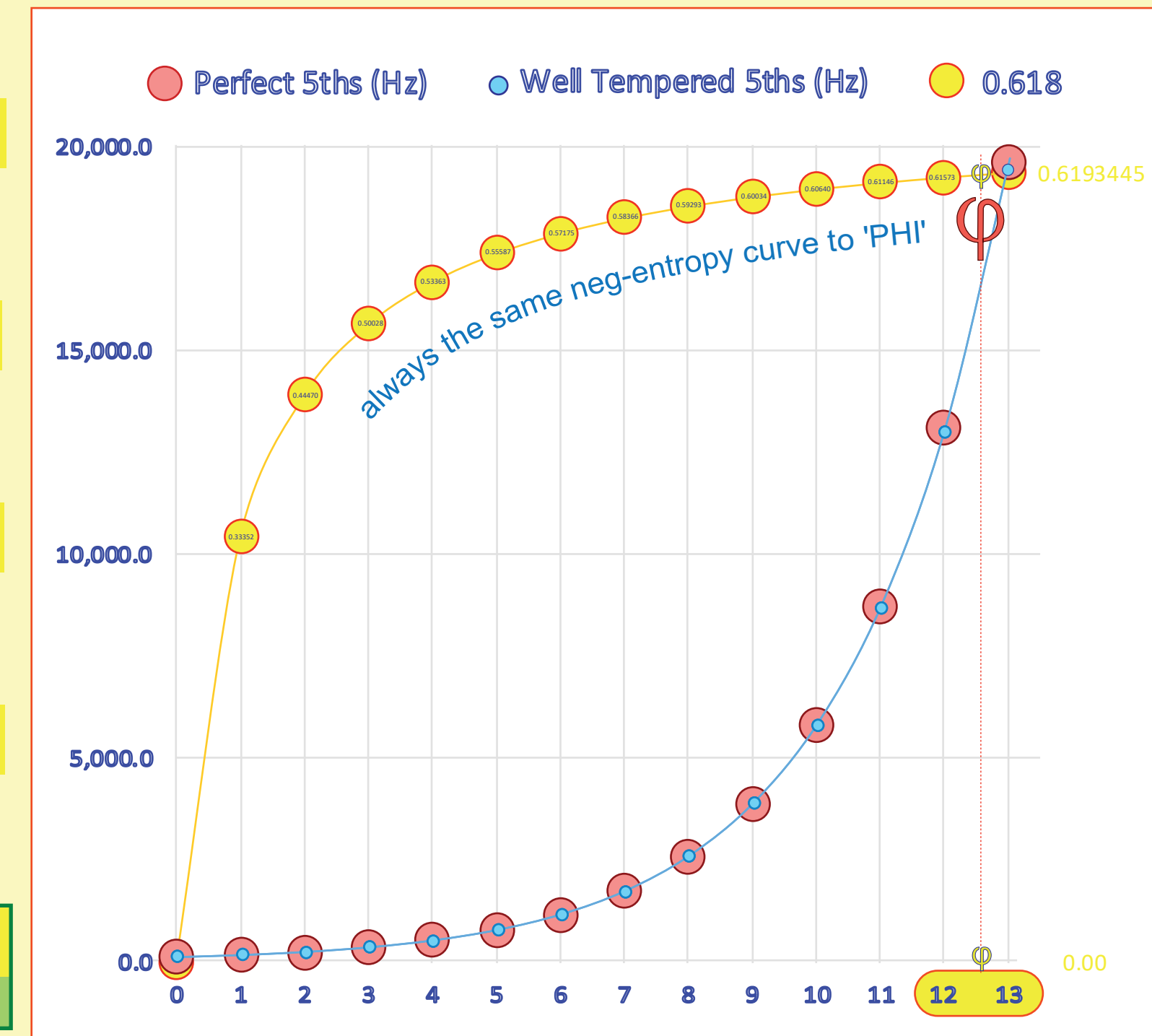
# PYTHAGOREAN COMMA; always the same neg-entropy curve to 'PHI-constant'

Phi calculated from a Hertz progression or a RATE, rather than what is usually calculated as a RATIO.

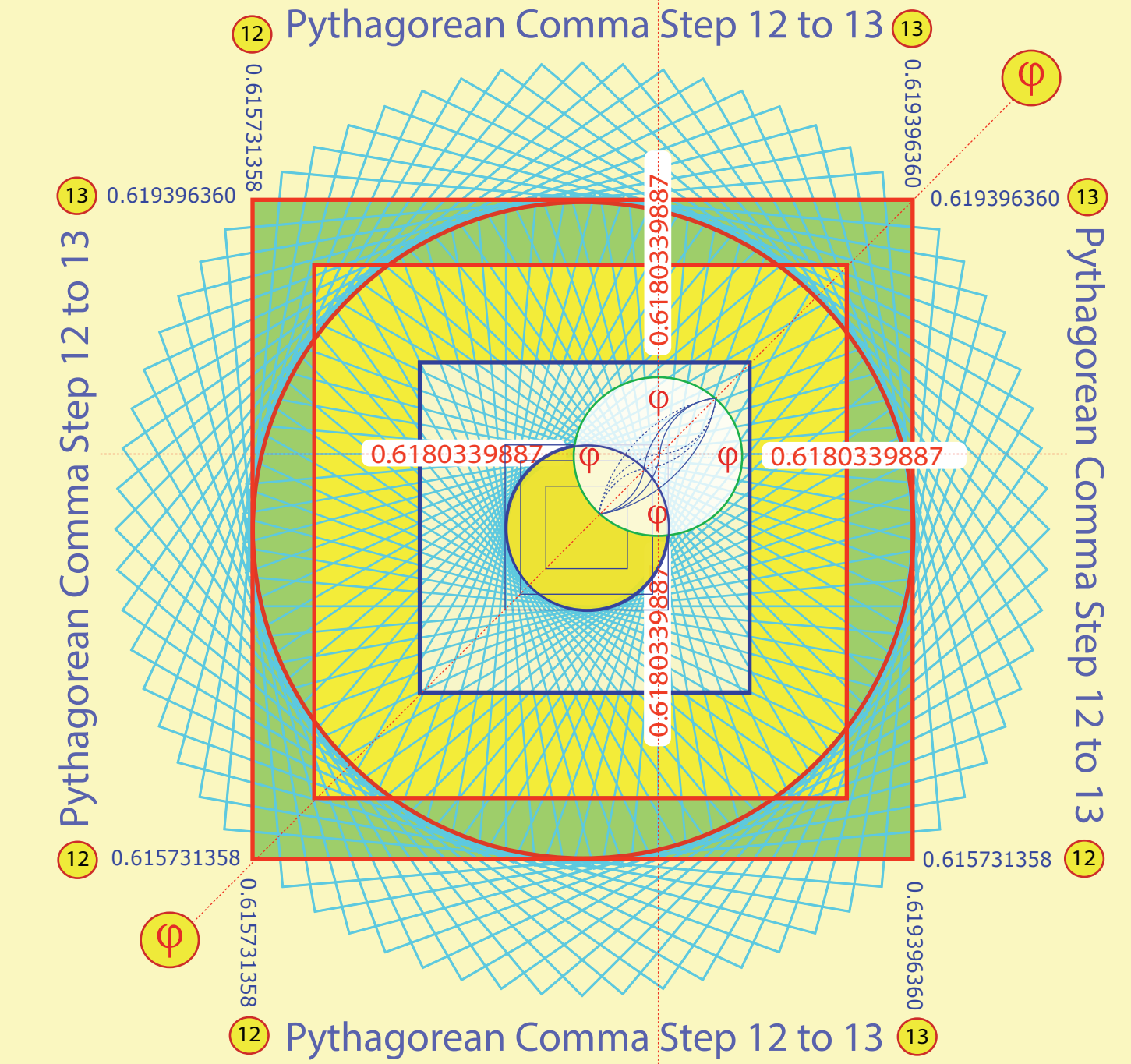


Perfect Octaves	CONTROL CELL	Perfect 5ths (Hz)	Well Tempered 5ths (Hz)	Difference (Hz)		0.618	0.382	%		
C0	100.00	C 100.0000	100.0000	0.00	0	C	0.00000	0.0000000000	0.0000000000	0
C1	200.00	G 150.0000	149.8307	0.17	1	G	0.33352	0.2061163130	0.5396378551	1
C2	400.00	D 225.0000	224.4924	0.51	2	D	0.44470	0.2748217215	0.7195170637	2
C3	800.00	A 337.5000	336.3586	1.14	3	A	0.50028	0.3091744038	0.8094566107	3
C4	1,600.00	E 506.2500	503.9684	2.28	4	E	0.53363	0.3297859957	0.8634202930	4
C5	3,200.00	B 759.3750	755.0995	4.28	5	B	0.55587	0.3435270424	0.8993960429	5
C6	6,400.00	Gb 1,139.0625	1,131.3708	7.69	6	Gb	0.57175	0.3533420632	0.9250929744	6
C7	12,800.00	Db 1,708.5938	1,695.1410	13.45	7	Db	0.58366	0.3607033178	0.9443656444	7
		Ab 2,562.8906	2,539.8417	23.05	8	Ab	0.59293	0.3664287284	0.9593554733	8
		Eb 3,844.3359	3,805.4628	38.87	9	Eb	0.60034	0.3710090480	0.9713473135	9
		Bb 5,766.5039	5,701.7518	64.75	10	Bb	0.60640	0.3747565744	0.9811587982	10
		F 8,649.7559	8,542.9751	106.78	11	F	0.61146	0.3778795056	0.9893350164	11
		C 12,974.6338	12,800	174.63	12	C	0.61573135799	0.3805219792	0.9962533372	12
					13		0.61939635977	0.3827869503	1.0021833101	13
		19,461.95	19,178.33	283.62			0.62257	0.0027792759	0.625351961	
		29,192.93	28,735.03	457.90			0.62535	0.0024522939		
		101.36433%	100.00%				0.62780	0.0021798089		

## DERIVING the VALUE of 'Phi' in 'SPACE-TIME'



Detail of Phi at the 'Phi-Point (0.61803...)' between steps 12 & 13  
[http://www.gci.org.uk/movies/PC\\_12\\_13.mp4](http://www.gci.org.uk/movies/PC_12_13.mp4)



7 'Perfect Octaves' don't commute with 12 'Perfect Fifths'      7 'Perfect Octaves' do commute with 12 'Well Tempered Fifths'

Feedback the differences between 12 Perfect Fifths & 12 'Well Tempered Fifths' & 'Phi' results at exactly the 'Phi-Point' between steps 12 & 13.