

Pythagorean 53 lattice
 Showing approximate ratios of primes 2-3-7-13-37

					+25	+26							
					37/24	37/32							
			+17	+18	+19	+20	+21	+22	+23	+24			
			52/27	13/9	13/12	13/8	39/32	117/64	351/256	1053/1024			
			-17	-16	-15	-14	-13	-12					
			28/27	14/9	7/6	7/4	21/16	63/32					
		-12	-11	-10	-9	-8	-7	-6	-5				
		160/81	40/27	10/9	5/3	5/4	15/8	45/32	135/128				
-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	
1024/729	256/243	128/81	32/27	16/9	4/3	1/1	3/2	9/8	27/16	81/64	243/128	729/512	
			+5	+6	+7	+8	+9	+10	+11	+12			
			256/135	64/45	16/15	8/5	6/5	9/5	27/20	81/80			
				+12	+13	+14	+15	+16	+17				
				64/63	32/21	8/7	12/7	9/7	27/14				
		-24	-23	-22	-21	-20	-19	-18	-17				
		2048/1053	512/351	128/117	64/39	16/13	24/13	18/13	27/26				
						-26	-25						
						64/37	48/37						

 Prime realizations and approximations

2/1	3/2	5/4	7/4	13/8	37/32
Octave	+1	-8	-14	+20	+26
1200.000	701.955	386.314	968.826	840.528	251.344
1200.000	701.955	384.360	972.630	839.100	250.830
Just	Just	-1.954	+3.804	-1.428	-0.514

In a 53-note Pythagorean circle, +52 fifths yields a "virtually tempered" fourth at 501.660 cents, larger than a pure 4/3 fourth (-1 fifth) by the Comma of Mercator at 3.615 cents. By comparison, (37/32)^2 would yield 1369/1024 or 502.688 cents.

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