

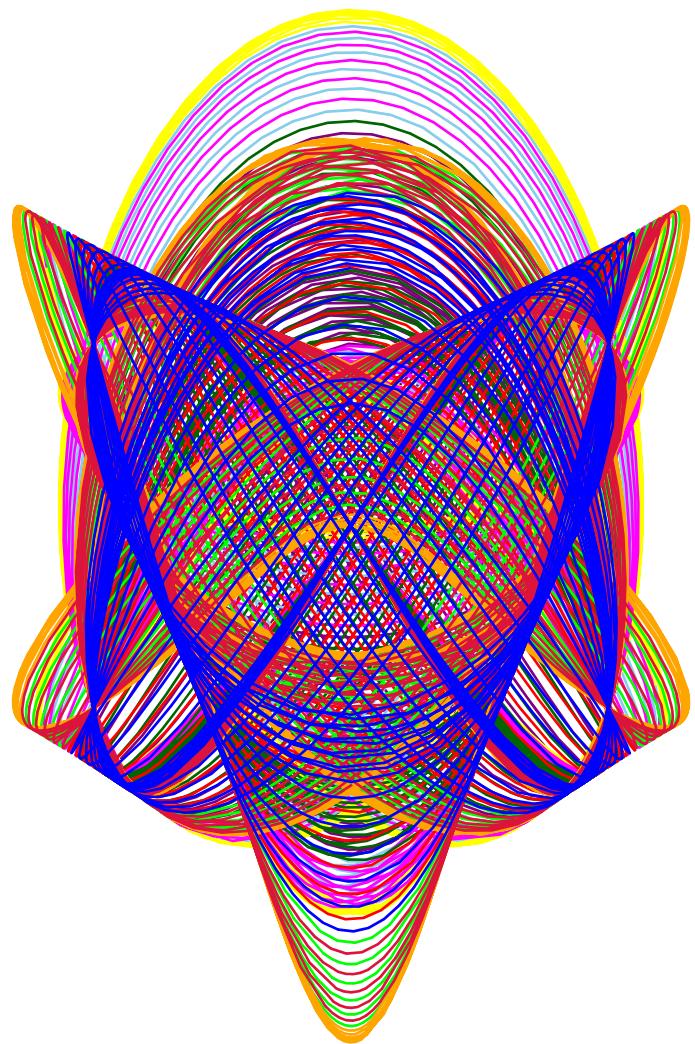
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[> # HI-NUM Keiko 22 CG analysis by H.E:
[> restart : with(plots) :
[> CP := [red, yellow, blue, green, magenta, "Purple", "Orange", "DarkGreen", "SkyBlue",
          "Crimson"];
CP := [red, yellow, blue, green, magenta, "Purple", "Orange", "DarkGreen", "SkyBlue",
       "Crimson"]
[> T := s :

[> FP :=  $\left[ T, \sin(T), \cos(T), \sin(\sin(T)), \cos(\cos(T)), \sin(\cos(T)), \sin\left(\tan\left(\frac{T}{5}\right)\right), \cos\left(\tan\left(\frac{T}{5}\right)\right) \right]$ ;
FP :=  $\left[ s, \sin(s), \cos(s), \sin(\sin(s)), \cos(\cos(s)), \sin(\cos(s)), \sin\left(\tan\left(\frac{1}{5}s\right)\right), \cos\left(\tan\left(\frac{1}{5}s\right)\right) \right]$ , (2)

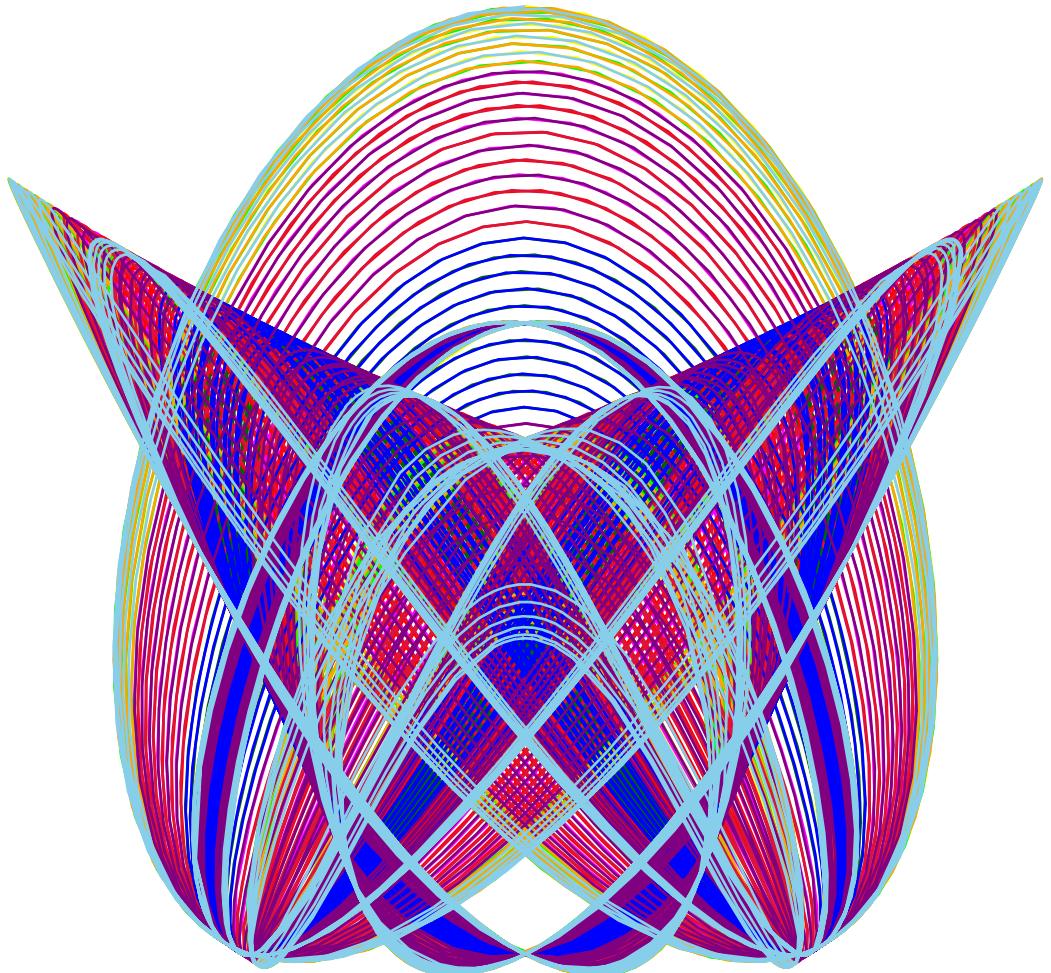
[> ?color;
[> for k from 5001 to 5100 do X1 := k : E := k mod 103 : h1 := E mod 8 + 1 : c := 0 :
   for x from 4 to 1 by -1 do Rx := X1 mod  $x^x$  : H || x :=  $\frac{(X1 - Rx)}{x^x} + 1$  : X1 := Rx :
   od: for ds from 1 to 10 do c := c + 1 : EQX := sin $\left(2 \cdot E \cdot (H || 1) \cdot s\right)$  + sin $\left(E \cdot (H || 1) \cdot s\right)$  . cos $\left(E \cdot (H || 3) \cdot s\right)$  . cos $(E \cdot (H || 2) \cdot s) \cdot FP[h1]$  : EQY := cos $(3 \cdot E \cdot (H || 1) \cdot s)$  + cos $(E \cdot (H || 2) \cdot s) \cdot \cos\left(E \cdot (H || 3) \cdot s\right)$  . cos $(E \cdot (H || 1) \cdot s) \cdot FP[h1]$  : NG || ds
   := plot $\left([EQX, EQY, s = \frac{(ds - 1) \cdot 2 \cdot \text{Pi}}{10} .. \frac{ds \cdot 2 \cdot \text{Pi}}{10}], axes = none, numpoints = 300,$ 
   scaling = constrained, color = CP[ ((ds + 6 * h1 + 2 * c) mod 10) + 1 ] ) : od: HG || c
   := seq(NG || j, j = 1 .. 10) : print(display(HG || c)) : print(Hi[h1] - Equ[X = EQX]) :
   print(Hi[k] - Equ[Y = EQY]) : od:

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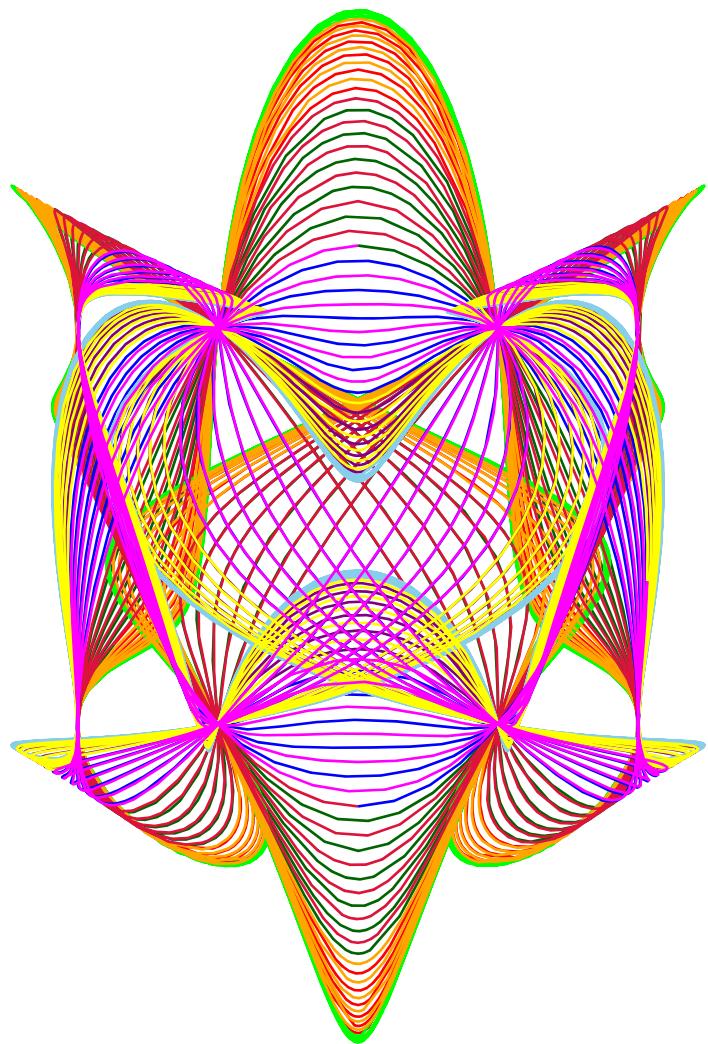


$$Hi_2 - Equ_{X=\sin(342s) + \sin(171s)\cos(342s)\cos(57s)\sin(s)}$$

$$Hi_{5001} - Equ_{Y=\cos(513s) + \cos(57s)\cos(342s)\cos(171s)\sin(s)}$$

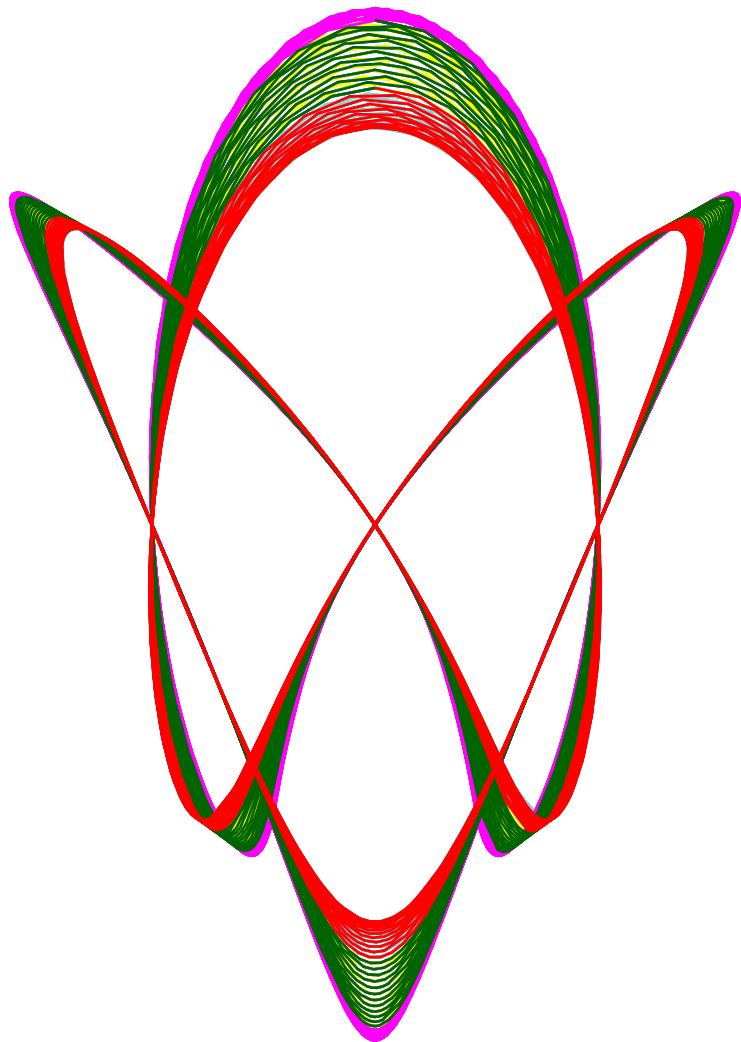


$$Hi_3 - Equ_X = \sin(464s) + \sin(232s) \cos(348s) \cos(58s) \cos(s)$$
$$Hi_{5002} - Equ_Y = \cos(696s) + \cos(58s) \cos(348s) \cos(232s) \cos(s)$$



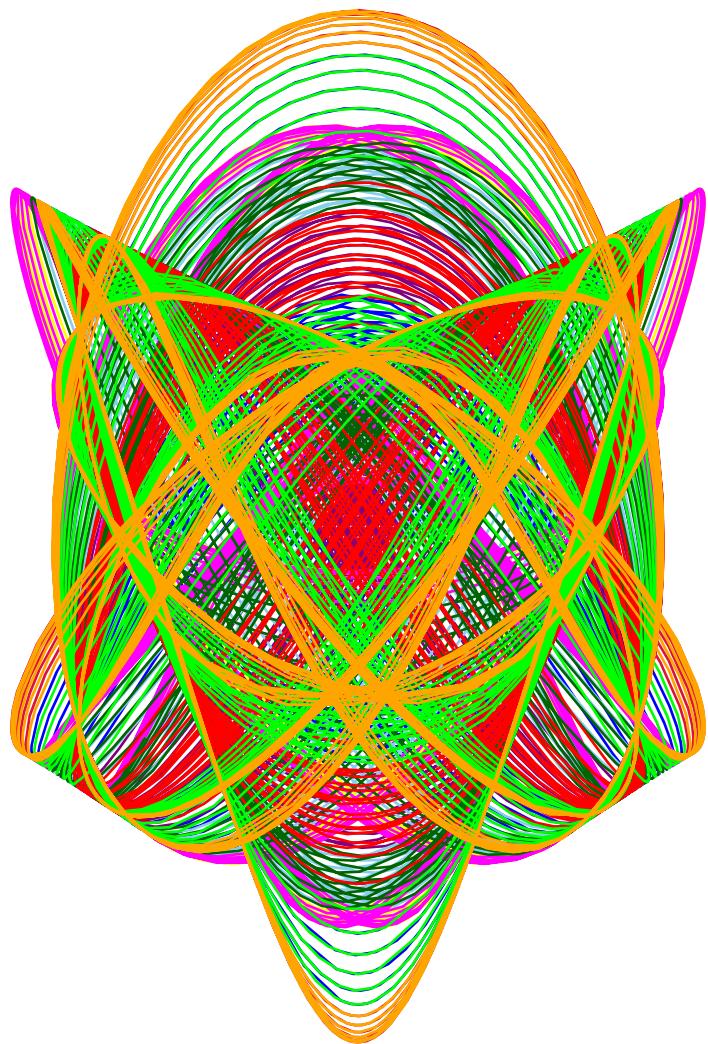
$$Hi_4 - Equ_{X = \sin(118s) + \sin(59s) \cos(354s) \cos(118s) \sin(\sin(s))}$$

$$Hi_{5003} - Equ_{Y = \cos(177s) + \cos(118s) \cos(354s) \cos(59s) \sin(\sin(s))}$$



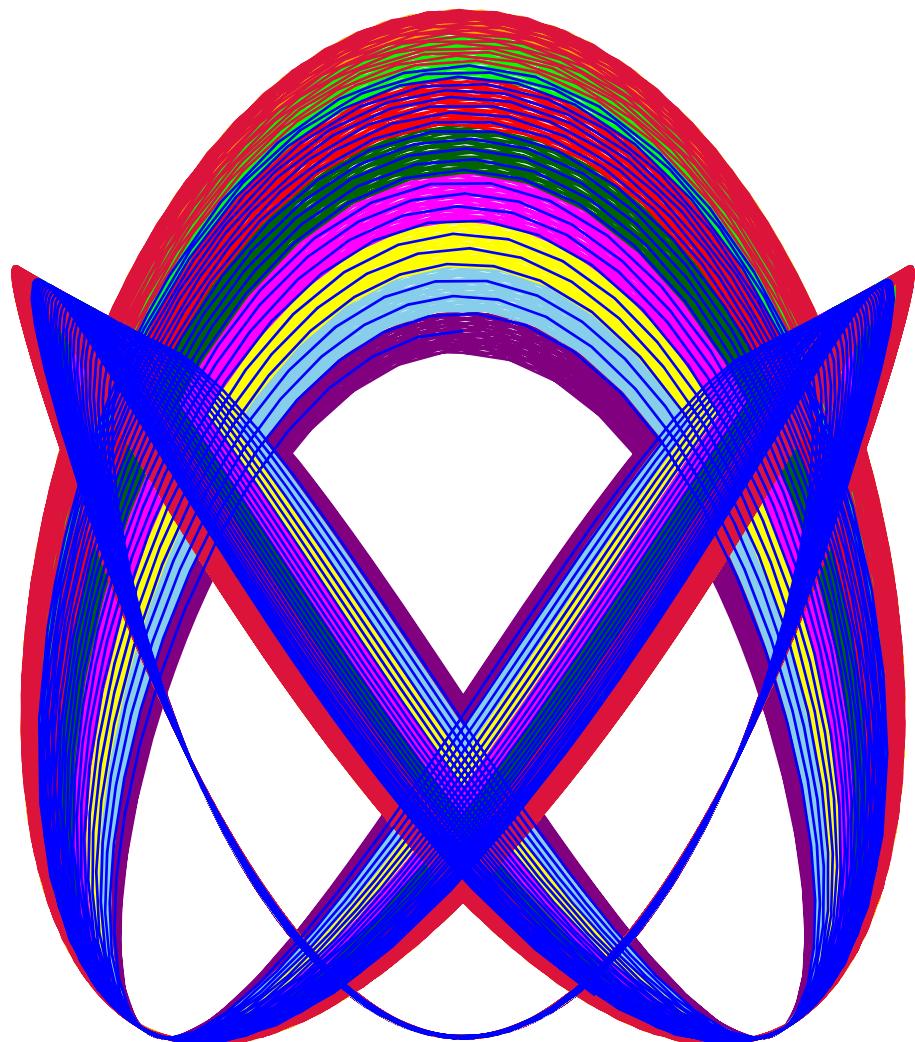
$$Hi_5 - Equ_X = \sin(240s) + \sin(120s) \cos(360s) \cos(120s) \cos(\cos(s))$$

$$Hi_{5004} - Equ_Y = \cos(360s) + \cos(120s)^2 \cos(360s) \cos(\cos(s))$$



$$Hi_6 - Equ_X = \sin(366s) + \sin(183s) \cos(366s) \cos(122s) \sin(\cos(s))$$

$$Hi_{5005} - Equ_Y = \cos(549s) + \cos(122s) \cos(366s) \cos(183s) \sin(\cos(s))$$

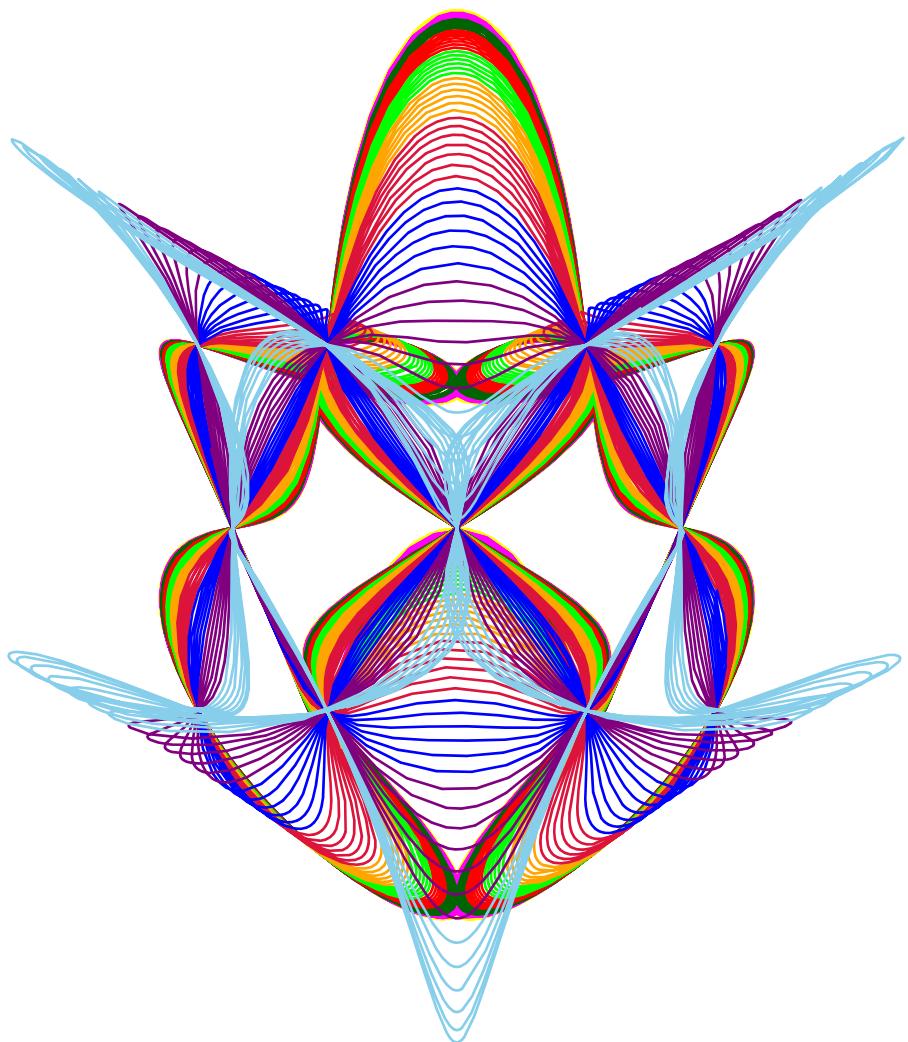


Hi₇ - Equ

$$X = \sin(496s) + \sin(248s) \cos(372s) \cos(124s) \sin\left(\tan\left(\frac{1}{5}s\right)\right)$$

Hi₅₀₀₆ - Equ

$$Y = \cos(744s) + \cos(124s) \cos(372s) \cos(248s) \sin\left(\tan\left(\frac{1}{5}s\right)\right)$$

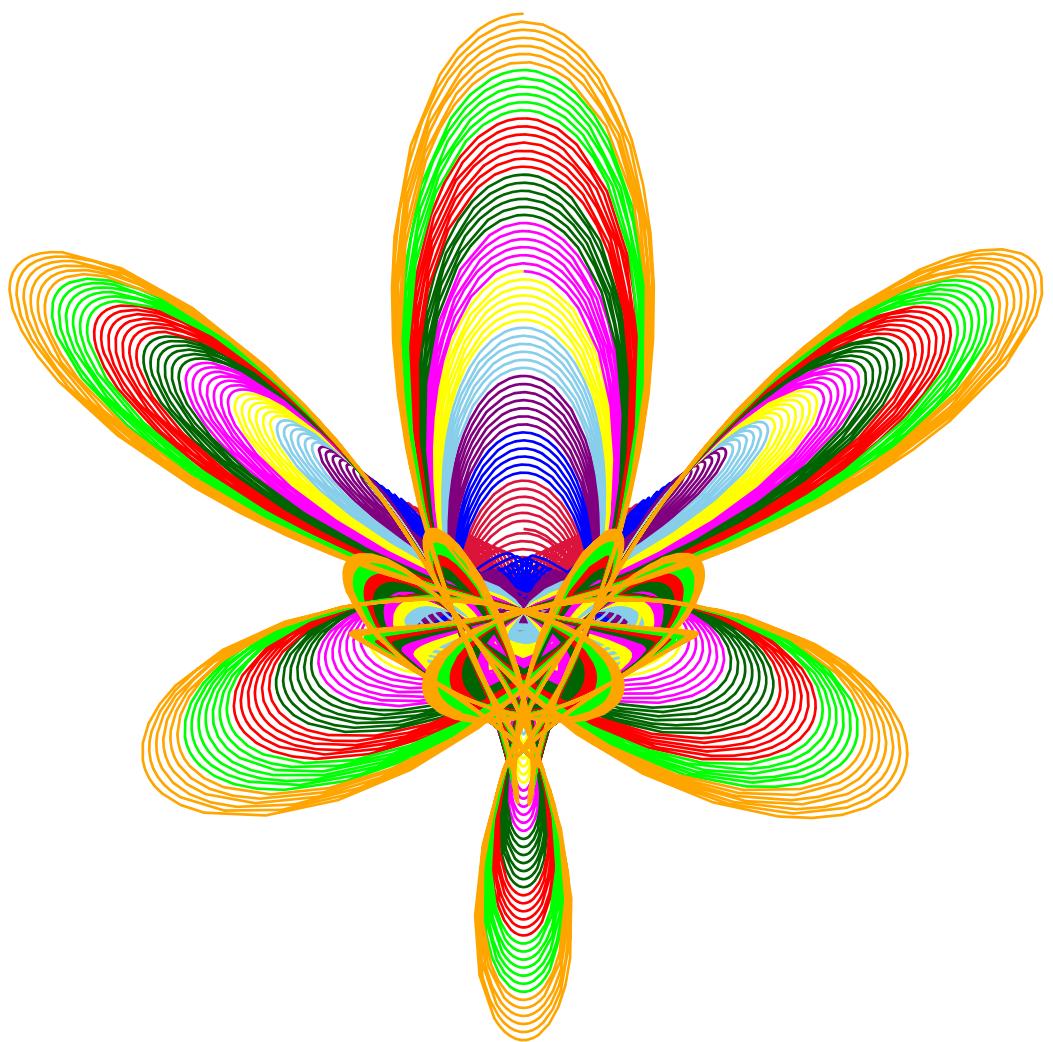


*Hi*₈ - Equ

$$X = \sin(126s) + \sin(63s) \cos(378s) \cos(189s) \cos\left(\tan\left(\frac{1}{5}s\right)\right)$$

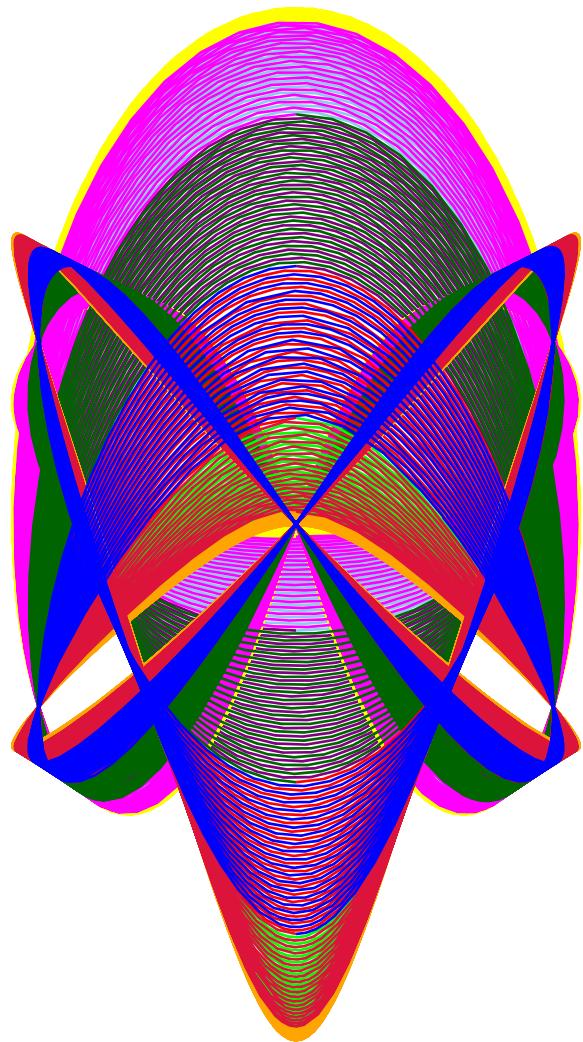
*Hi*₅₀₀₇ - Equ

$$Y = \cos(189s) + \cos(189s) \cos(378s) \cos(63s) \cos\left(\tan\left(\frac{1}{5}s\right)\right)$$



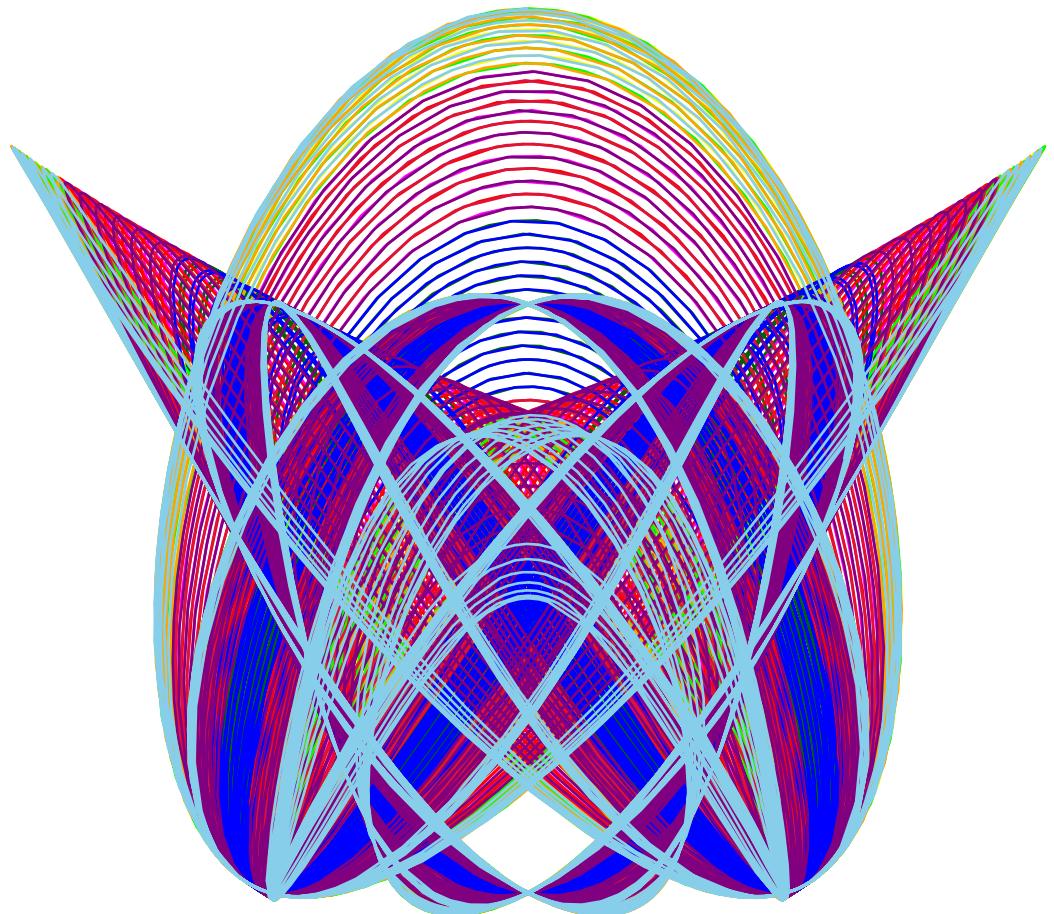
$$Hi_1 - Equ_{X = \sin(256s) + \sin(128s)\cos(384s)\cos(192s)s}$$

$$Hi_{5008} - Equ_{Y = \cos(384s) + \cos(192s)\cos(384s)\cos(128s)s}$$



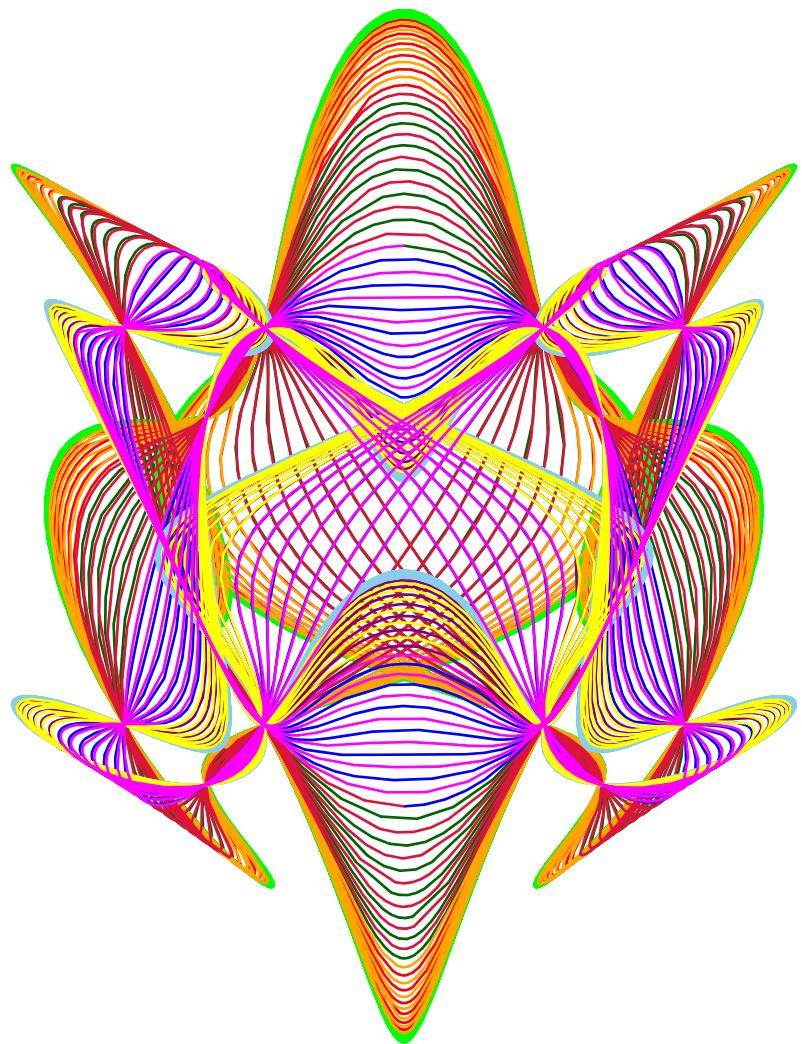
$$Hi_2 - Equ_{X = \sin(390s) + \sin(195s)\cos(390s)\cos(195s)\sin(s)}$$

$$Hi_{5009} - Equ_{Y = \cos(585s) + \cos(195s)^2\cos(390s)\sin(s)}$$



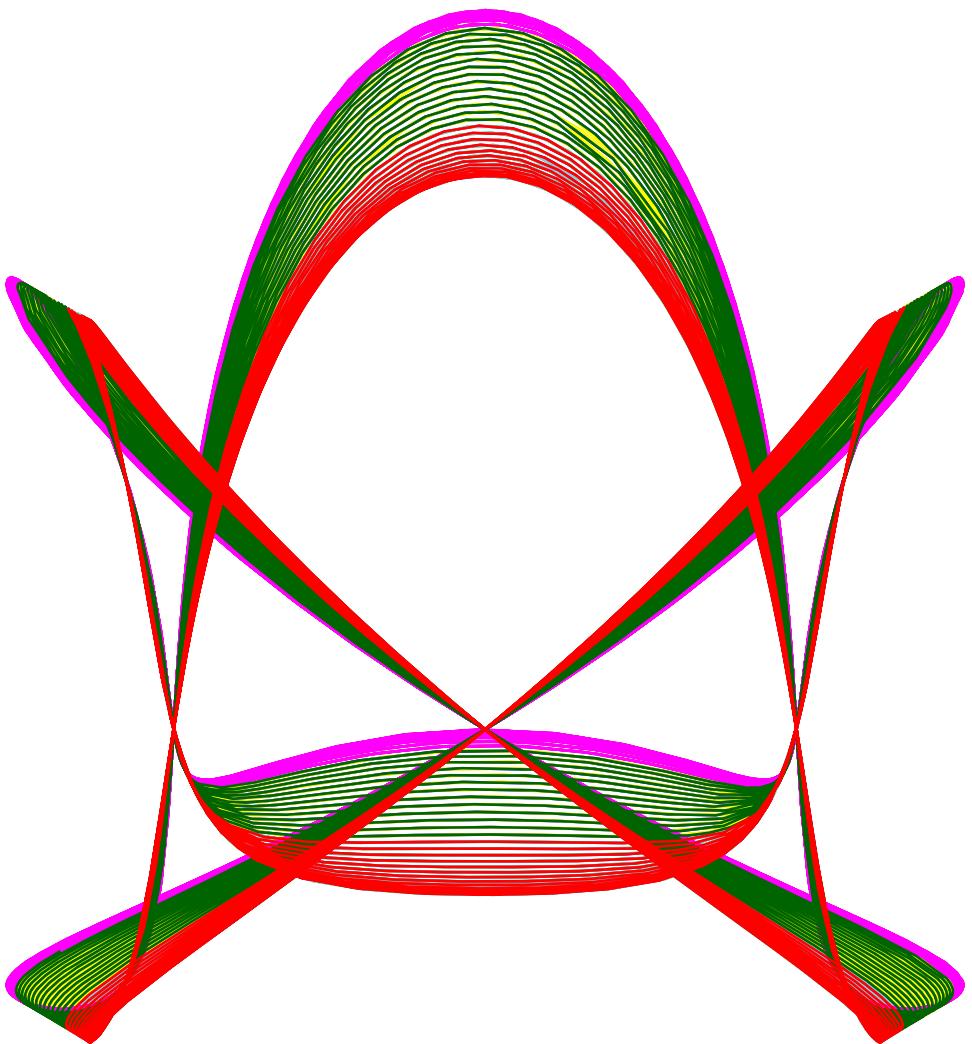
$$Hi_3 - Equ_{X = \sin(528s) + \sin(264s)\cos(396s)\cos(198s)\cos(s)}$$

$$Hi_{5010} - Equ_{Y = \cos(792s) + \cos(198s)\cos(396s)\cos(264s)\cos(s)}$$



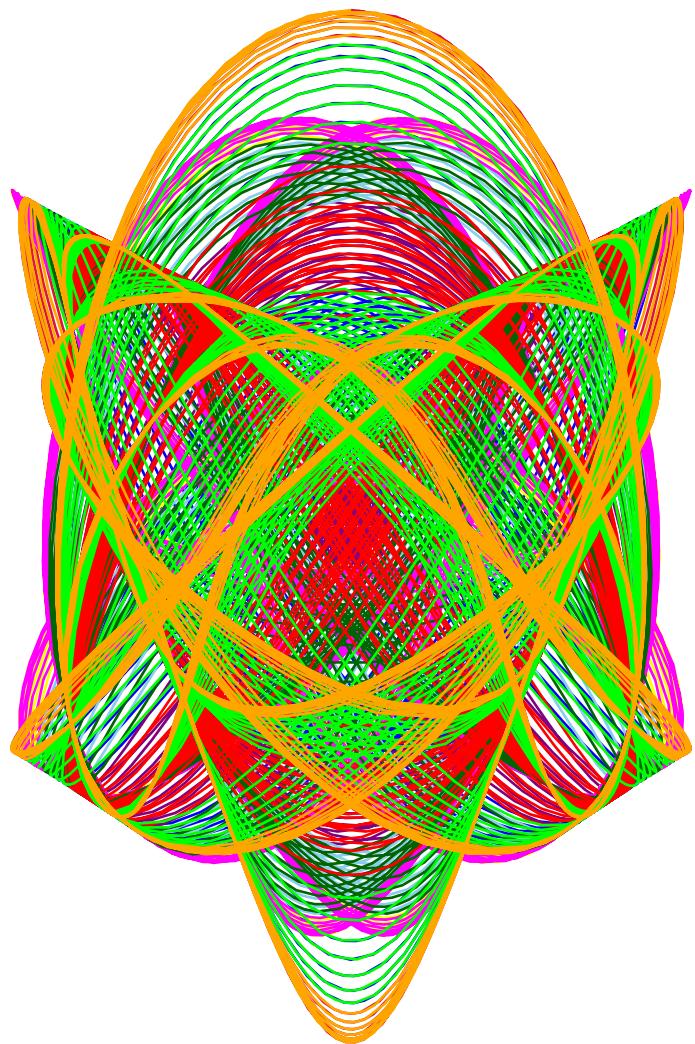
$$Hi_4 - Equ_{X=\sin(134s) + \sin(67s)\cos(402s)\cos(268s)\sin(\sin(s))}$$

$$Hi_{5011} - Equ_{Y=\cos(201s) + \cos(268s)\cos(402s)\cos(67s)\sin(\sin(s))}$$



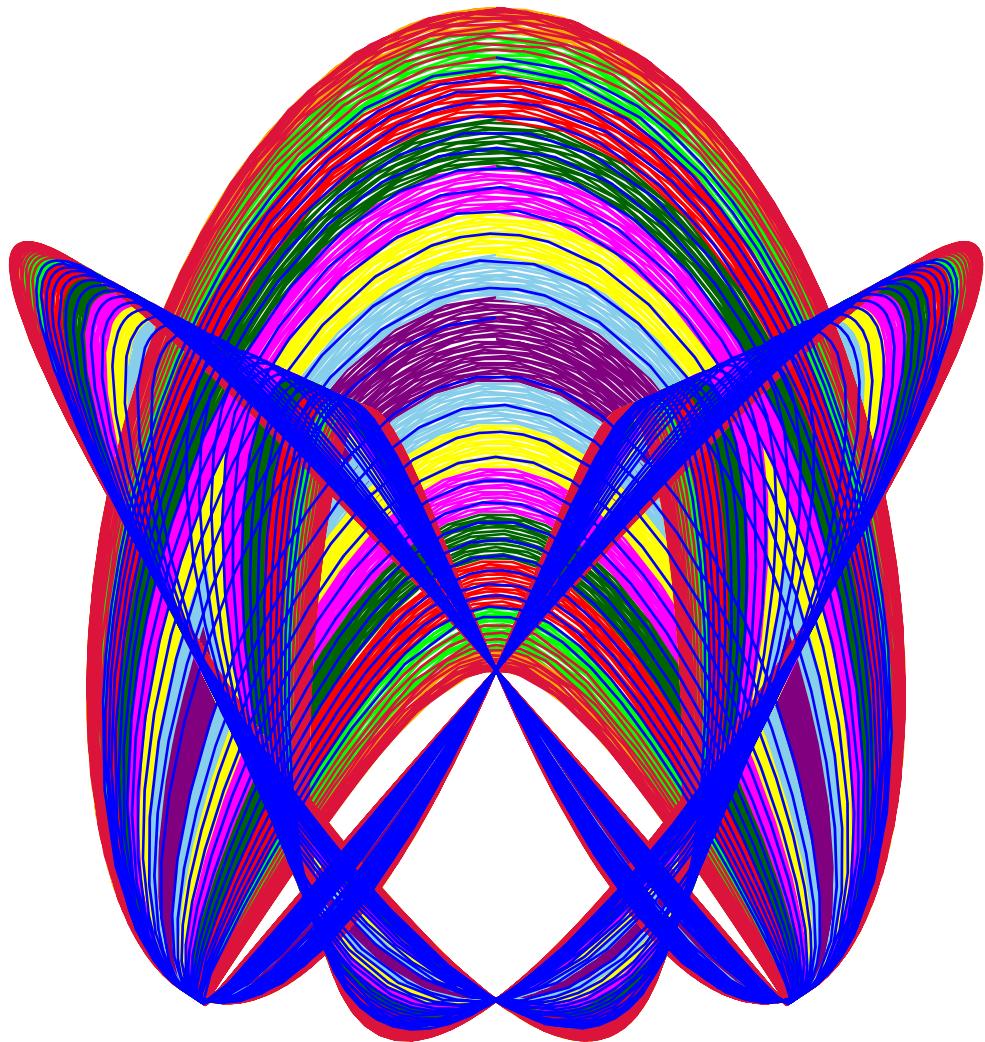
$$Hi_5 - Equ_X = \sin(272s) + \sin(136s) \cos(408s) \cos(272s) \cos(\cos(s))$$

$$Hi_{5012} - Equ_Y = \cos(408s) + \cos(272s) \cos(408s) \cos(136s) \cos(\cos(s))$$



$$Hi_6 - Equ_X = \sin(414s) + \sin(207s) \cos(414s) \cos(276s) \sin(\cos(s))$$

$$Hi_{5013} - Equ_Y = \cos(621s) + \cos(276s) \cos(414s) \cos(207s) \sin(\cos(s))$$

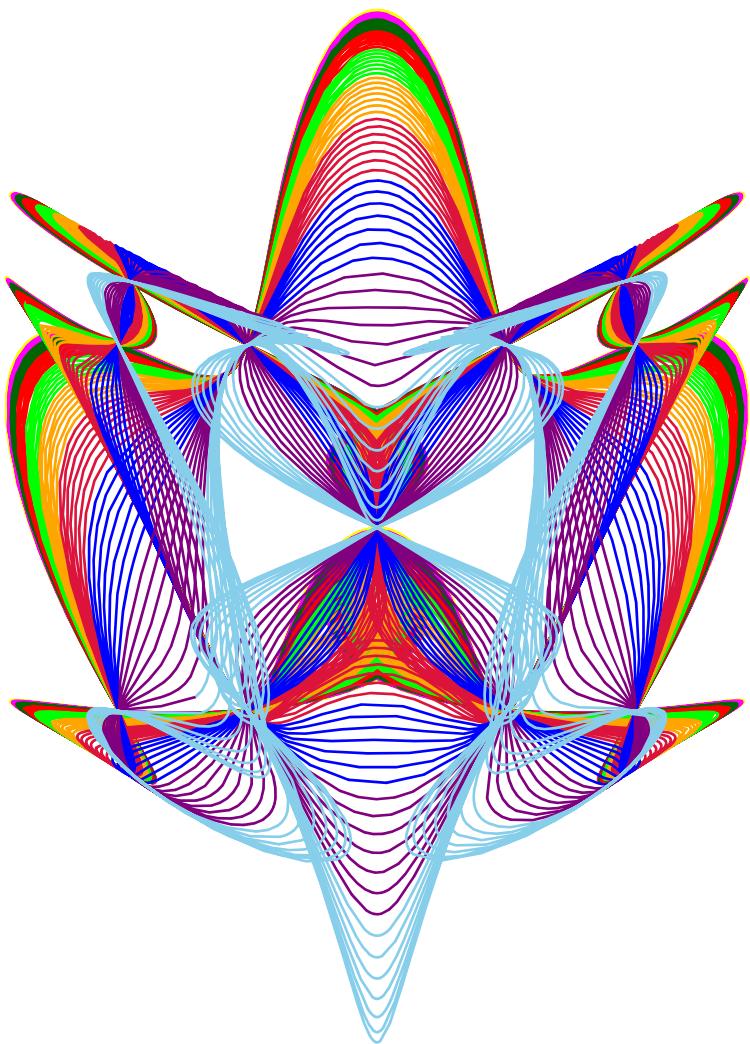


Hi₇ - Equ

$$X = \sin(560s) + \sin(280s) \cos(420s) \cos(280s) \sin\left(\tan\left(\frac{1}{5}s\right)\right)$$

Hi₅₀₁₄ - Equ

$$Y = \cos(840s) + \cos(280s)^2 \cos(420s) \sin\left(\tan\left(\frac{1}{5}s\right)\right)$$

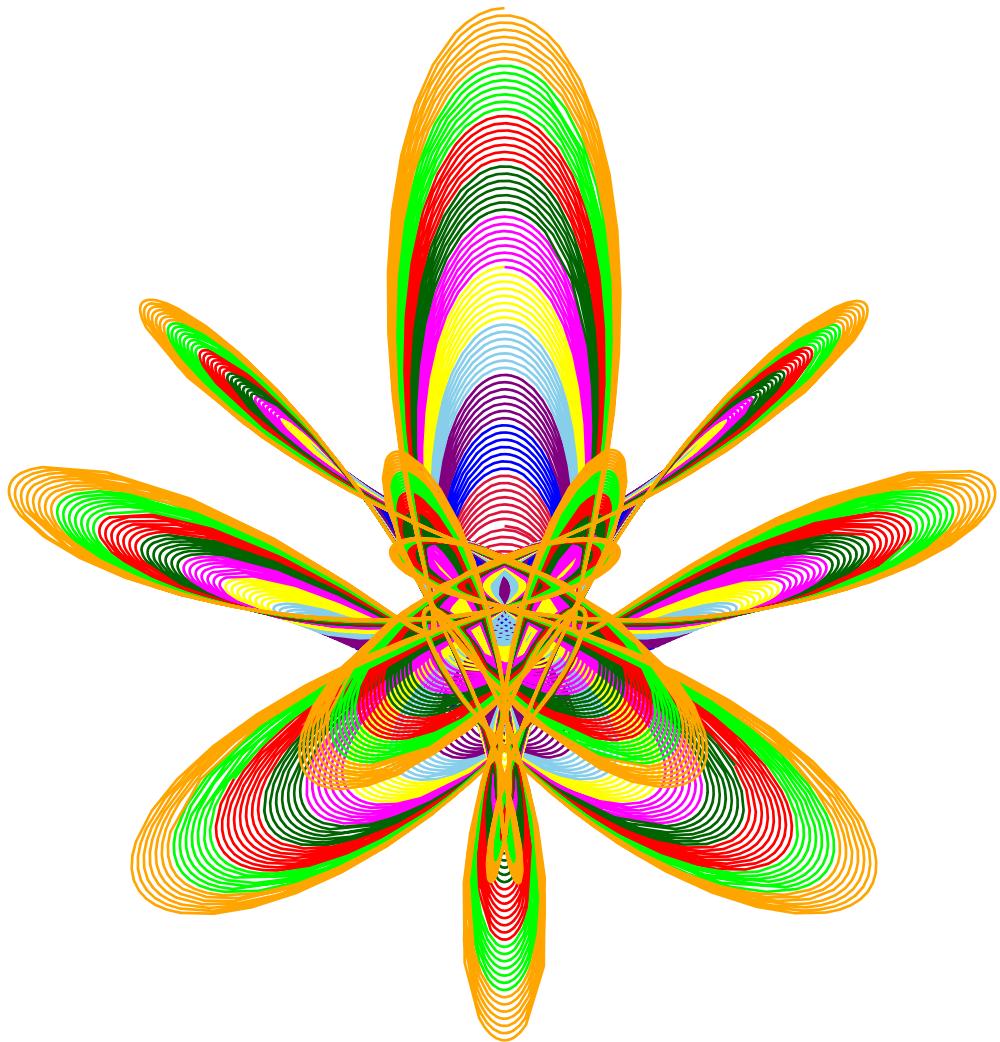


*Hi*₈ - Equ

$$X = \sin(142s) + \sin(71s) \cos(426s) \cos(355s) \cos\left(\tan\left(\frac{1}{5}s\right)\right)$$

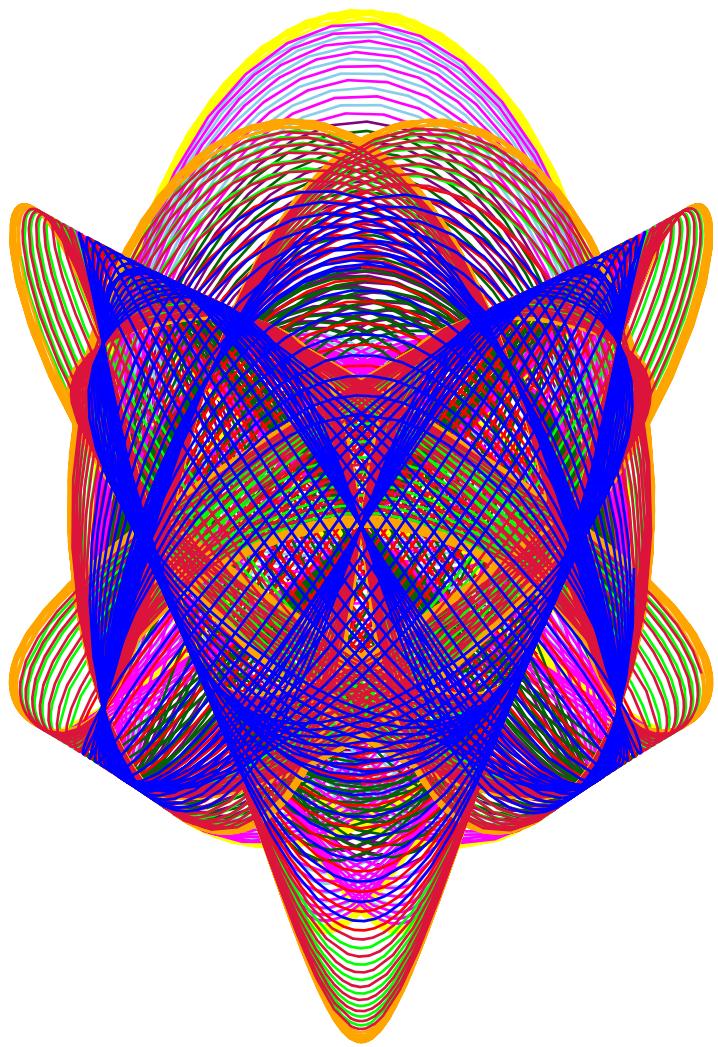
*Hi*₅₀₁₅ - Equ

$$Y = \cos(213s) + \cos(355s) \cos(426s) \cos(71s) \cos\left(\tan\left(\frac{1}{5}s\right)\right)$$



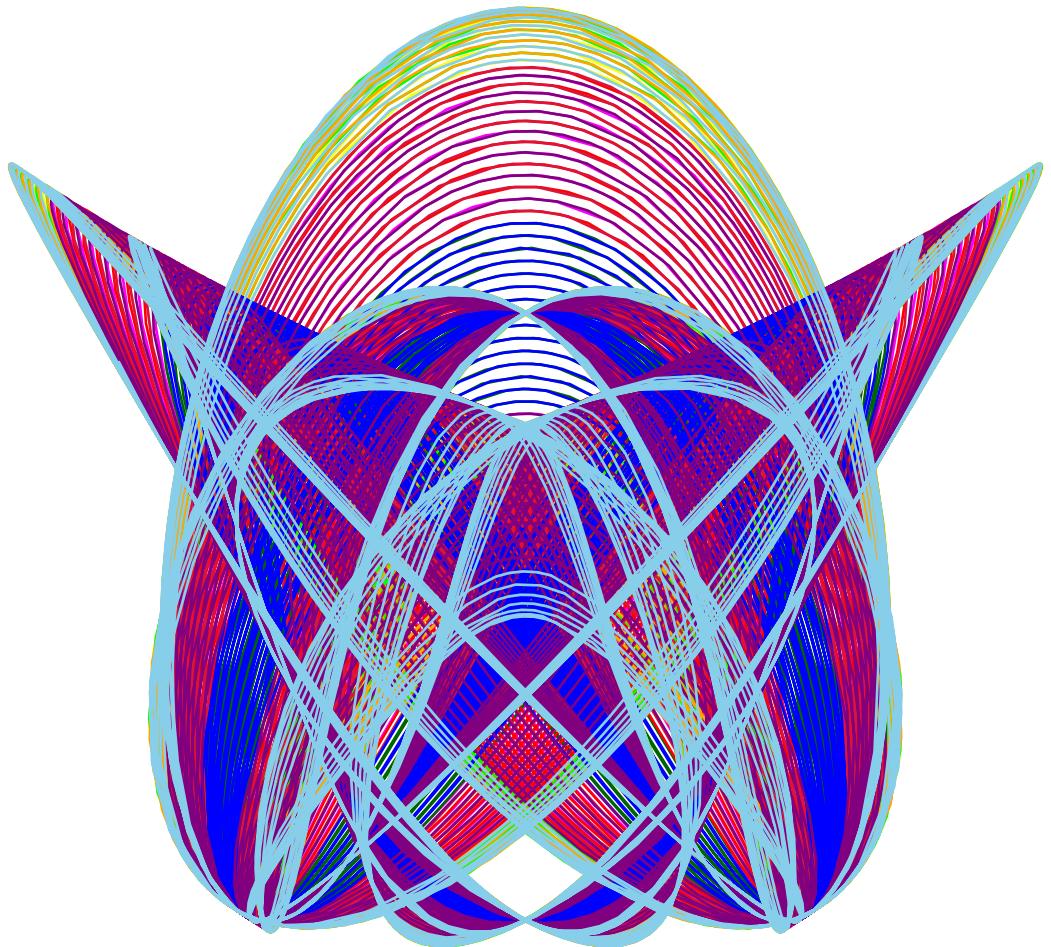
$$Hi_1 - Equ_{X = \sin(288s) + \sin(144s)\cos(432s)\cos(360s)s}$$

$$Hi_{5016} - Equ_{Y = \cos(432s) + \cos(360s)\cos(432s)\cos(144s)s}$$



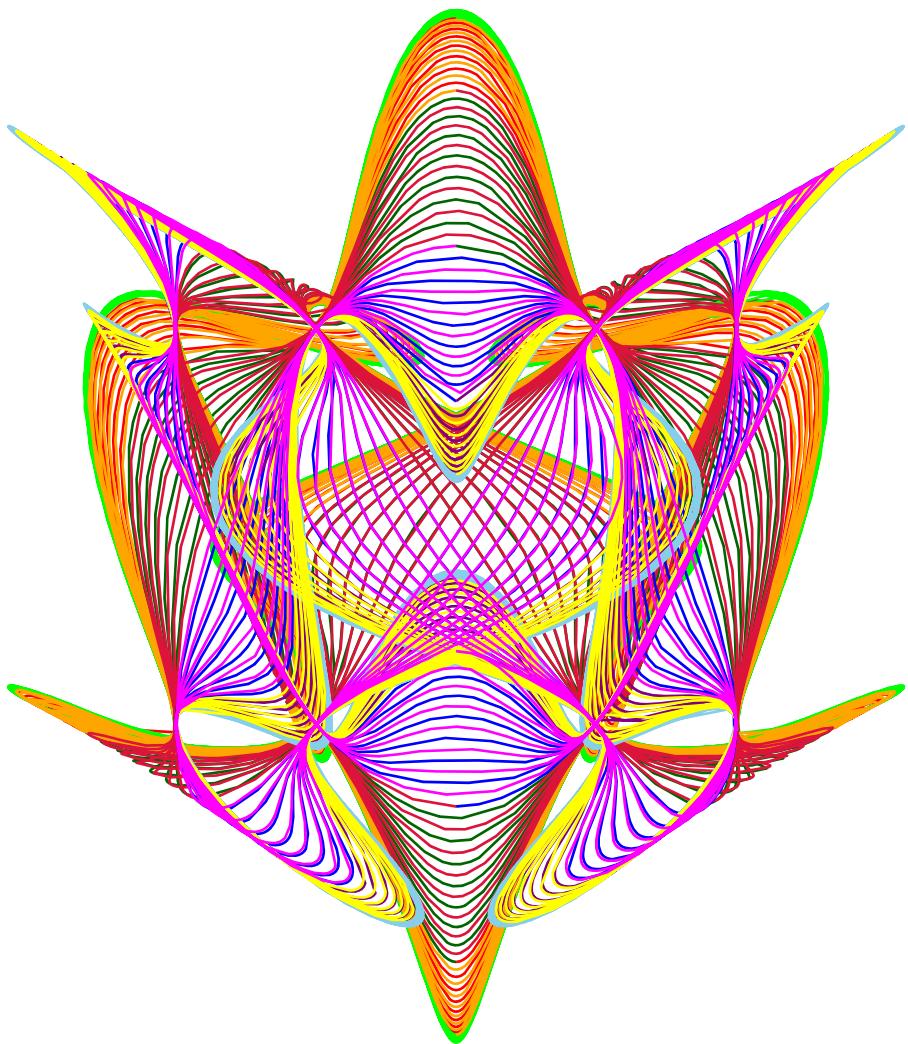
$$Hi_2 - Equ_{X = \sin(438s) + \sin(219s)\cos(438s)\cos(365s)\sin(s)}$$

$$Hi_{5017} - Equ_{Y = \cos(657s) + \cos(365s)\cos(438s)\cos(219s)\sin(s)}$$



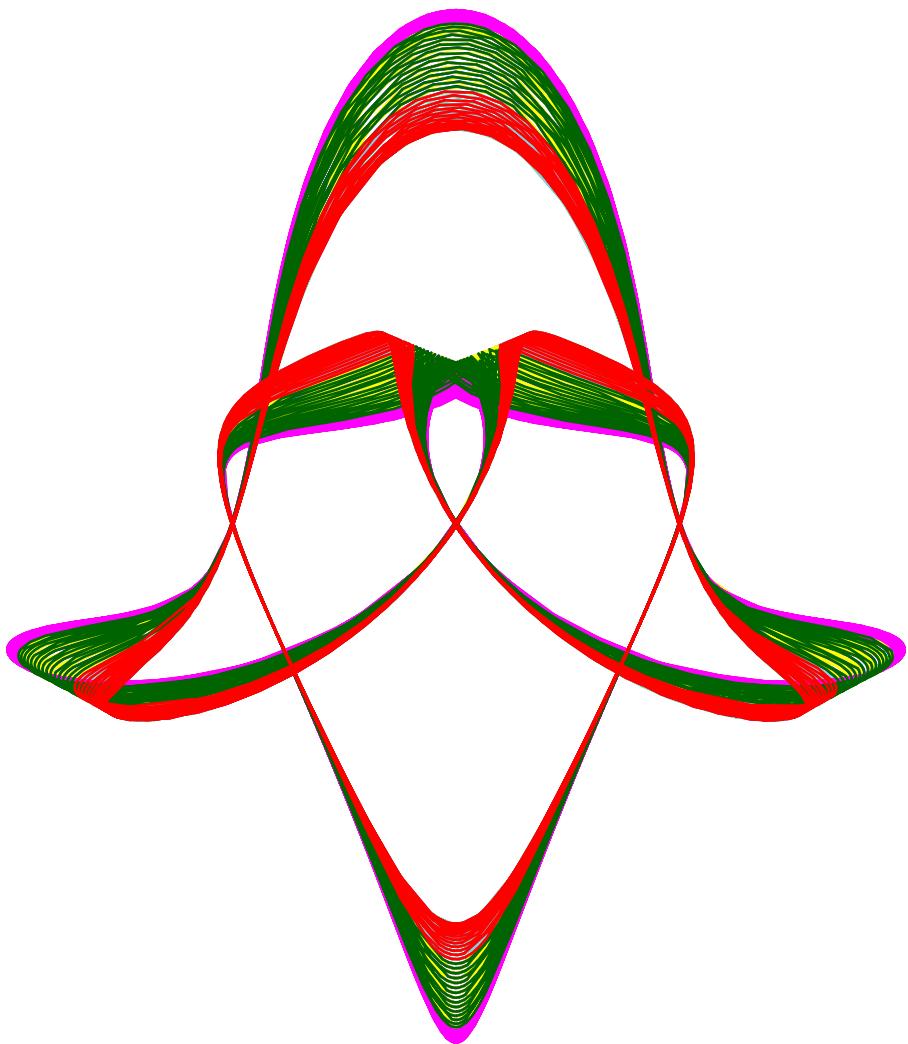
$$Hi_3 - Equ_{X = \sin(592s) + \sin(296s)\cos(444s)\cos(370s)\cos(s)}$$

$$Hi_{5018} - Equ_{Y = \cos(888s) + \cos(370s)\cos(444s)\cos(296s)\cos(s)}$$



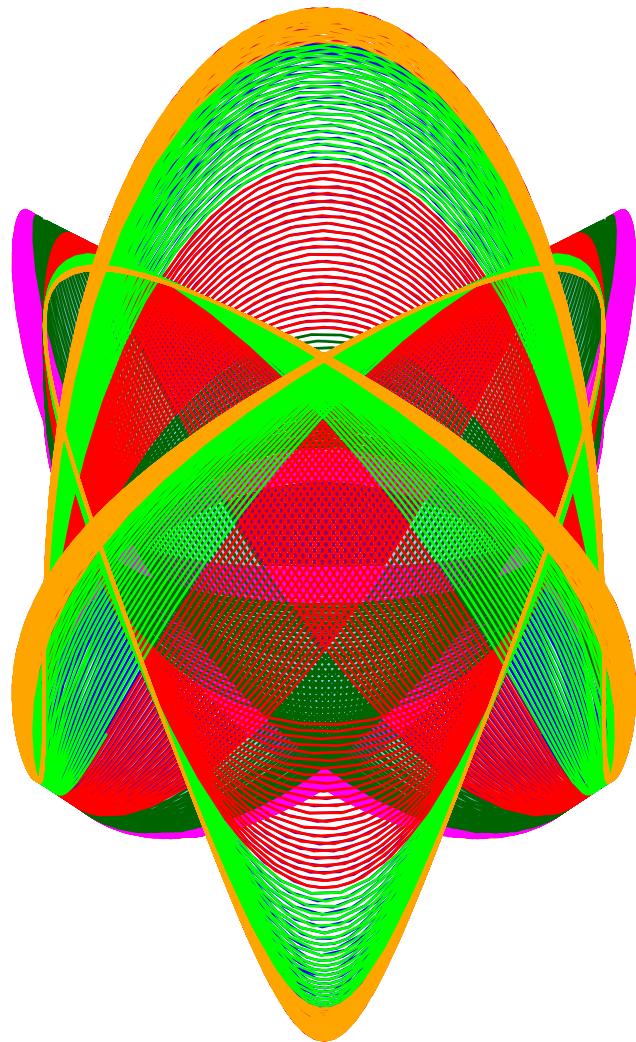
$$Hi_4 - Equ \quad X = \sin(150s) + \sin(75s) \cos(450s)^2 \sin(\sin(s))$$

$$Hi_{5019} - Equ \quad Y = \cos(225s) + \cos(450s)^2 \cos(75s) \sin(\sin(s))$$



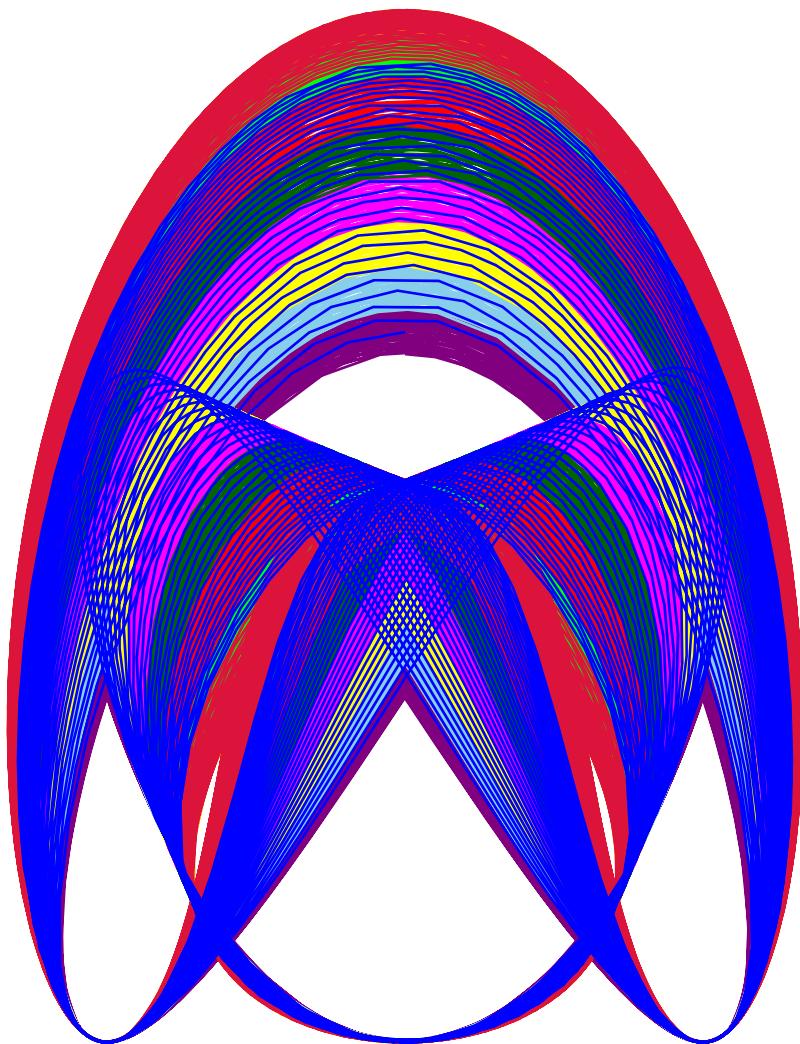
$$Hi_5 - Equ \quad X = \sin(304s) + \sin(152s) \cos(456s)^2 \cos(\cos(s))$$

$$Hi_{5020} - Equ \quad Y = \cos(456s) + \cos(456s)^2 \cos(152s) \cos(\cos(s))$$



$$Hi_6 - Equ_{X = \sin(462s) + \sin(231s)\cos(462s)^2\sin(\cos(s))}$$

$$Hi_{5021} - Equ_{Y = \cos(693s) + \cos(462s)^2\cos(231s)\sin(\cos(s))}$$



Hi₇ - Equ

$$X = \sin(624 s) + \sin(312 s) \cos(468 s)^2 \sin\left(\tan\left(\frac{1}{5} s\right)\right)$$

Hi₅₀₂₂ - Equ

$$Y = \cos(936 s) + \cos(468 s)^2 \cos(312 s) \sin\left(\tan\left(\frac{1}{5} s\right)\right)$$

Warning, computation interrupted

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