

**A 3-note chord that has a strongly isographic Klumpenhouwer Network with the chord composed of the resulting 3 difference tones.**

Defining a frequency transposition  $T_N$  as  $F_1 * N = F_2$

and a frequency inversion  $I_N$  as  $F_1 * F_2 = N$

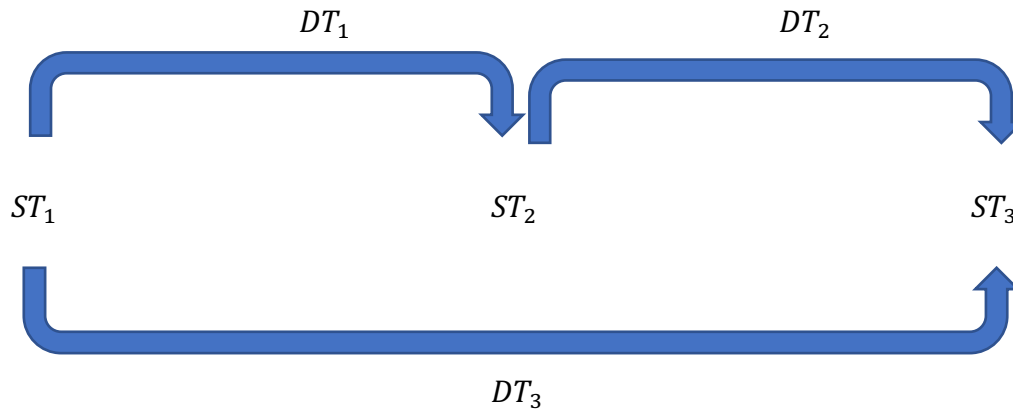
The 3-note chord with sounding tones ( $ST$ ) in Hz:

$$ST_1 = 100$$

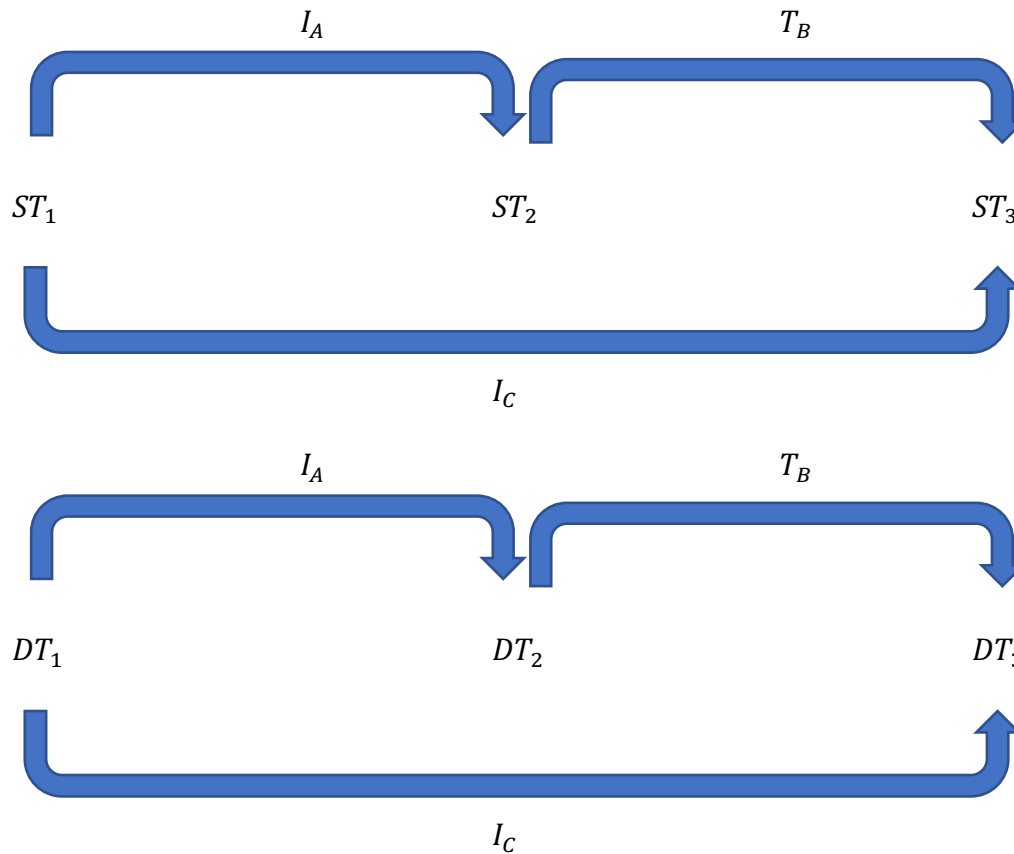
$$ST_2 = 100 + \frac{1}{3} \sqrt[3]{13500000 - 1500000 \sqrt{69}} + 50 \left(\frac{2}{3}\right)^{2/3} \sqrt[3]{9 + \sqrt{69}}$$

$$ST_3 = \frac{50}{9} \left( 30 + 3 \times 2^{2/3} \sqrt[3]{3(9 - \sqrt{69})} + \sqrt[3]{2} (3(9 - \sqrt{69}))^{2/3} + 3 \times 2^{2/3} \sqrt[3]{3(9 + \sqrt{69})} + \sqrt[3]{2} (3(9 + \sqrt{69}))^{2/3} \right)$$

produces 3 difference tones ( $DT$ ):



The 3 sounding tones and the 3 difference tones will have strongly isographic Klumpenhouver Networks with the following graphs:



The exact values of  $DT_1$ ,  $DT_2$ , &  $DT_3$ , and A, B & C can be determined from the exact values of the  $ST$ 's written above, but the approximate values are:

$$\begin{aligned} ST_1 &= 100 \text{ Hz} \\ ST_2 &= \sim 232.47 \text{ Hz} \\ ST_3 &= \sim 407.96 \text{ Hz} \end{aligned}$$

$$\begin{aligned} DT_1 &= \sim 132.47 \text{ Hz} \\ DT_2 &= \sim 175.49 \text{ Hz} \\ DT_3 &= \sim 307.96 \text{ Hz} \end{aligned}$$

$$\begin{aligned} A &= \sim 23247.2 \\ B &= \sim 1.75 \\ C &= \sim 40796.0 \end{aligned}$$