

BYZANTINE MUSIC FORMULÆ

Fourth Mode - Sticheraric

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* The Byzantine music formulae herein were extracted from sticheraric melodies found in the *Zoe Anastasi-matarion* (14th edition, 2002) Volume I of *Mousike Kypsele* (1883 edition), the *Doxastarion* of Konstantinos Protopsaltis (1844 edition), and the volume I of the *Athonias* (1906 edition) by Petros Philanthidis.

Key:

1 = accented syllable
0 = unaccented syllable
X = syllable that may be either accented or unaccented

Variations of the same formula are indicated in color

Medial Cadences on Pa

A) Accented on Last Syllable

Pa - Pa

0001	
10X01	
10001	
100X001	
01010001	
X0010X01	

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01010X01

X00010001

100010X01

Vou - Pa

This section is almost empty because medial cadences on Vou are rarely followed by a medial cadence on Pa

010010001

Di - Pa

10001

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ⲛⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓ
0 0

ⲛⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓ
1 0 0 0 1 $\frac{\pi}{q}$

ⲛⲓⲛⲁⲓ
1

00010001 ⲛⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓ
0 0 0 1 0 0 0 1 $\frac{\pi}{q}$

100010X01 ⲛⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓⲛⲁⲓ
1 0 0 0 0 1 0 X 0 1 $\frac{\pi}{q}$

B) Accented on Second to Last Syllable

Pa - Pa

10 π
 $\begin{array}{c} \text{q} \\ 1 \ 0 \end{array} \pi$
 q

π
 $\begin{array}{c} \text{q} \\ 1 \ 0 \end{array} \pi$
 q

010 π
 $\begin{array}{c} \text{q} \\ 0 \ 1 \ 0 \end{array} \pi$
 q

10010 π
 $\begin{array}{c} \text{q} \\ 1 \ \text{q} \ \text{q} \ \text{q} \ \text{q} \ \text{q} \ \text{q} \ \text{q} \end{array} \pi$
 q

π
 $\begin{array}{c} \text{q} \\ 1 \ 0 \ 0 \ 1 \ 0 \end{array} \pi$
 q

π
 $\begin{array}{c} \text{q} \\ 1 \ \text{q} \ \text{q} \ \text{q} \ \text{q} \ \text{q} \ \text{q} \ \text{q} \end{array} \pi$
 q

π
 $\begin{array}{c} \text{q} \\ 1 \ 0 \ 0 \ 1 \ 0 \end{array} \pi$
 q

π
 $\begin{array}{c} \text{q} \\ 1 \ 0 \ 0 \ 1 \ 0 \end{array} \pi$
 q

π
 $\begin{array}{c} \text{q} \\ 1 \ 1 \ 0 \ 1 \ 0 \end{array} \pi$
 q

11010 π
 $\begin{array}{c} \text{q} \\ 1 \ 1 \ 0 \ 1 \ 0 \end{array} \pi$
 q

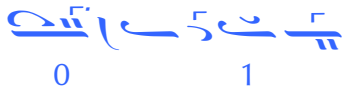
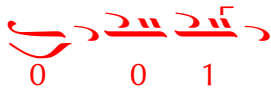
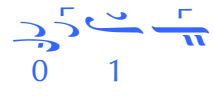
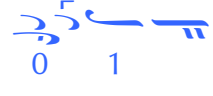


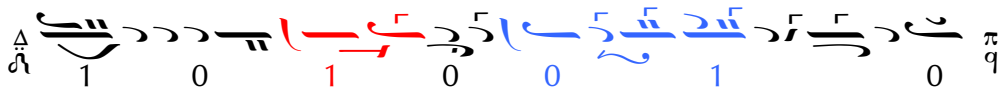



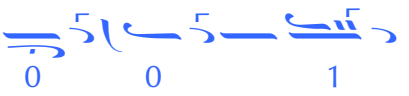
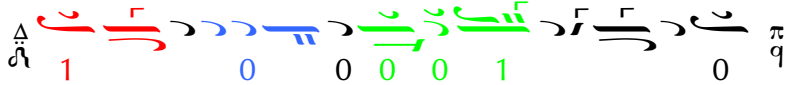
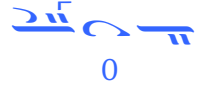


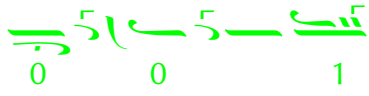
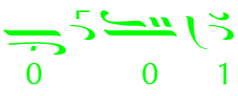
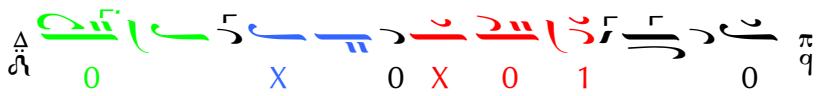


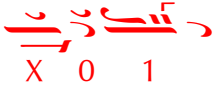
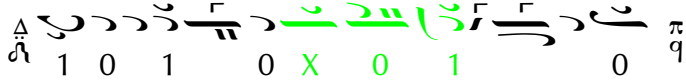
010010 π
 $\begin{array}{c} \text{q} \\ 0 \ 1 \ 0 \ 0 \ 1 \ 0 \end{array} \pi$
 q

π
 $\begin{array}{c} \text{q} \\ 0 \ 1 \ 0 \ 0 \ 1 \ 0 \end{array} \pi$
 q

π
 $\begin{array}{c} \text{q} \\ 0 \ 1 \ 0 \ 0 \ 1 \ 0 \end{array} \pi$
 q

π
 $\begin{array}{c} \text{q} \\ 0 \ 1 \end{array} \pi$
 q

Fourth Mode - Sticheraric

			
			
			
0010010			
			
1010010			
			
0100010			
			
1000010			
			
			
0X0X010			
			
1010X010			

Fourth Mode - Sticheraric

X 0 1

010000010 $\frac{\Delta}{\alpha}$ 0 0 1 0 0 0 0 0 1 0 $\frac{\pi}{9}$

Fourth Mode - Sticheraric

C) Accented on Third to Last Syllable

Pa - Pa

100		
101		
0100		
10100		
10X0X		
000100		
010100		
010X0X		
100X0X		

Fourth Mode - Sticheraric

100X0X	π_9
100X0X	π_9
10X0X0X	π_9
0100100	π_9
100010X	π_9
100X0X0X	π_9

Fourth Mode - Sticheraric

5 5 5 5

01000X0X π
 $\frac{9}{9}$ 0 1 0 0 0 X 0 X $\frac{9}{9}$

00010100 π
 $\frac{9}{9}$ 0 0 0 1 0 1 0 0 $\frac{9}{9}$

10010100 π
 $\frac{9}{9}$ 1 0 0 1 0 1 0 0 $\frac{9}{9}$

000100100 π
 $\frac{9}{9}$ 0 0 0 1 0 0 1 0 0 $\frac{9}{9}$

1010X00X0X

π
 $\frac{9}{9}$ 1 0 1 0 X 0 0 X 0 X $\frac{9}{9}$

$\frac{9}{9}$ X

$\frac{9}{9}$ X

$\frac{9}{9}$ X

Vou - Pa

This section is empty because medial cadences on Vou are rarely followed by a medial cadence on Pa

Di - Pa

100 Δ
 $\frac{9}{9}$ 1 0 0 $\frac{9}{9}$ 1

Δ
 $\frac{9}{9}$ 1 0 0 0 $\frac{9}{9}$

Fourth Mode - Sticheraric

0100 Δ δ $\begin{array}{cccc} \text{—} & \text{—} & \text{—} & \text{—} \\ \text{0} & \text{1} & \text{0} & \text{0} \end{array} \pi_9$

10100 Δ δ $\begin{array}{ccccc} \text{—} & \text{—} & \text{—} & \text{—} & \text{—} \\ \text{1} & \text{0} & \text{1} & \text{0} & \text{0} \end{array} \pi_9$

X010X Δ δ $\begin{array}{ccccc} \text{—} & \text{—} & \text{—} & \text{—} & \text{—} \\ \text{X} & \text{0} & \text{1} & \text{0} & \text{X} \end{array} \pi_9$
 $\begin{array}{cc} \text{—} & \text{—} \\ \text{0} & \text{1} \end{array}$ $\begin{array}{cc} \text{—} & \text{—} \\ \text{0} & \text{1} \end{array}$

10X0X Δ δ $\begin{array}{ccccc} \text{—} & \text{—} & \text{—} & \text{—} & \text{—} \\ \text{1} & \text{0} & \text{X} & \text{0} & \text{X} \end{array} \pi_9$ $\begin{array}{c} \text{—} \\ \text{0} \end{array}$

0X00100 Δ δ $\begin{array}{cccccc} \text{—} & \text{—} & \text{—} & \text{—} & \text{—} & \text{—} \\ \text{0} & \text{X} & \text{0} & \text{0} & \text{1} & \text{0} \end{array} \pi_9$

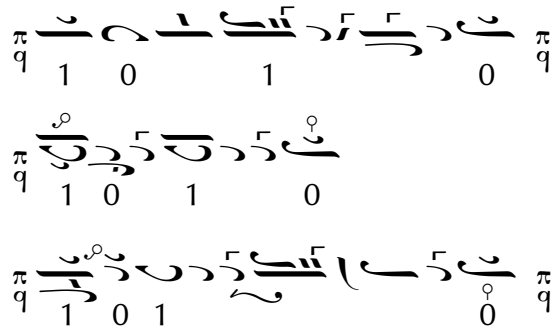
0100100 Δ δ $\begin{array}{cccccc} \text{—} & \text{—} & \text{—} & \text{—} & \text{—} & \text{—} \\ \text{0} & \text{1} & \text{0} & \text{0} & \text{1} & \text{0} \end{array} \pi_9$
 $\begin{array}{cc} \text{—} & \text{—} \\ \text{0} & \text{1} \end{array}$ $\begin{array}{cc} \text{—} & \text{—} \\ \text{0} & \text{1} \end{array}$ $\begin{array}{cc} \text{—} & \text{—} \\ \text{1} & \text{0} \end{array}$
 $\begin{array}{cc} \text{—} & \text{—} \\ \text{0} & \text{1} \end{array}$ $\begin{array}{c} \text{—} \\ \text{0} \end{array}$

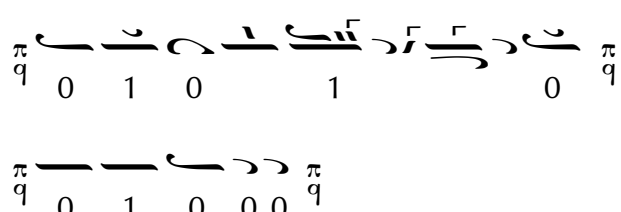
0100X0X Δ δ $\begin{array}{cccccc} \text{—} & \text{—} & \text{—} & \text{—} & \text{—} & \text{—} \\ \text{0} & \text{1} & \text{0} & \text{0} & \text{X} & \text{0} \end{array} \pi_9$ $\begin{array}{c} \text{—} \\ \text{X} \end{array}$
 $\begin{array}{cc} \text{—} & \text{—} \\ \text{0} & \text{1} \end{array}$
 $\begin{array}{cc} \text{—} & \text{—} \\ \text{0} & \text{1} \end{array}$

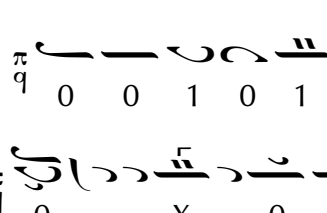
10XX0X0X Δ δ $\begin{array}{cccccc} \text{—} & \text{—} & \text{—} & \text{—} & \text{—} & \text{—} \\ \text{1} & \text{0} & \text{X} & \text{X} & \text{0} & \text{X} \end{array} \pi_9$ $\begin{array}{c} \text{—} \\ \text{0} \end{array}$ $\begin{array}{c} \text{—} \\ \text{X} \end{array}$
 $\begin{array}{cc} \text{—} & \text{—} \\ \text{1} & \text{0} \end{array}$ $\begin{array}{cc} \text{—} & \text{—} \\ \text{1} & \text{0} \end{array}$

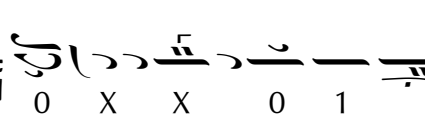
D) Accented on Fourth to Last Syllable

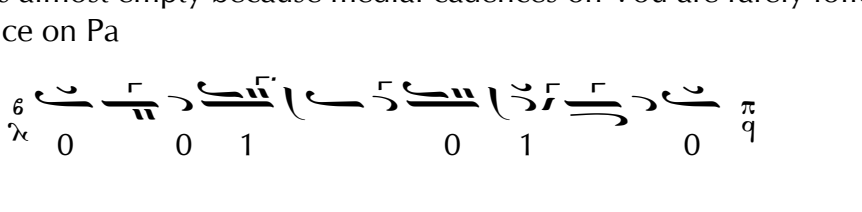
Pa - Pa

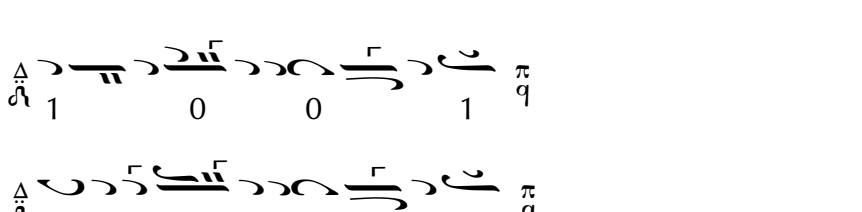
1010 

01010 

01000 

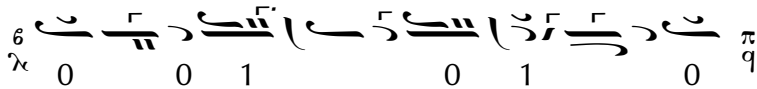
001010 

0X01001 

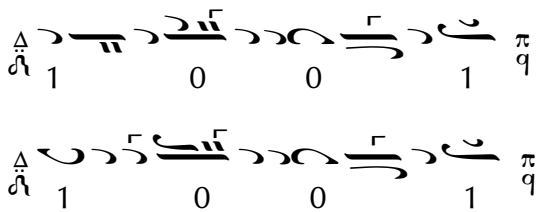
0XX01001 

Vou - Pa

This section is almost empty because medial cadences on Vou are rarely followed by a medial cadence on Pa

001010 

Di - Pa

1001 

Fourth Mode - Sticheraric

X010	Δ 	
01001	Δ 	
X01001	Δ 	
OX01010	Δ 	
0101010	Δ 	
0100X010	Δ 	
10001001	Δ 	

Medial Cadences on Vou

E) Accented on Last Syllable

Pa - Vou

This section is small because melodies in fourth mode do not frequently move from Pa to Vou.

10001 π
 γ γ

010001 π
 γ γ

00010001 π
 γ γ

Vou - Vou

This section is also almost empty because medial cadences on Vou are rarely followed by another medial cadence on Vou

01 γ
 γ γ

X001 γ
 γ γ

10001 γ
 γ γ

γ γ

Di - Vou

This section is almost empty because melodies in this mode do not move from Di to Vou in many ways.

10X001 Δ
 γ γ



G) Accented on Third to Last Syllable

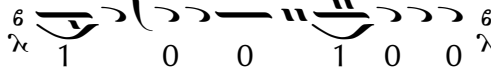
Pa - Vou

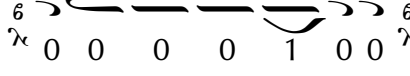
100	π q	
	π q	
	π q	
0100	π q	
00100	π q	
	π q	
	π q	
100100	π q	
0X0101	π q	
1000100	π q	
0010100	π q	
10010100	π q	
00100100	π q	

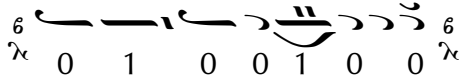
Fourth Mode - Sticheraric

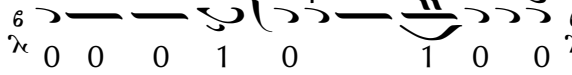
Vou - Vou


0100  

100100 

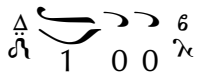
0000100 

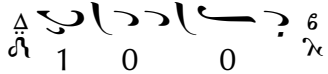
0100100 


00010100 

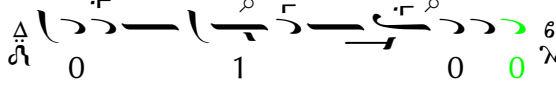
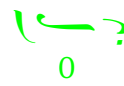
100010100 


Di - Vou


100 





0100 



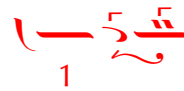
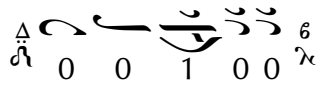






Fourth Mode - Sticheraric

00100



Fourth Mode - Sticheraric

H) Accented on Fourth to Last Syllable

Pa - Vou

This section is small because the melody in this mode does not move from Pa to Vou in very many ways.

01010 $\begin{array}{c} \pi \\ \rho \\ \text{0 1 0 1 0} \end{array} \begin{array}{c} \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \end{array} \begin{array}{c} \text{6} \\ \lambda \end{array}$

$\begin{array}{c} \pi \\ \rho \\ \text{0 1 0 1 0} \end{array} \begin{array}{c} \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \end{array} \begin{array}{c} \text{6} \\ \lambda \end{array}$

0001010 $\begin{array}{c} \pi \\ \rho \\ \text{0 0 0 1 0 1 0} \end{array} \begin{array}{c} \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \end{array} \begin{array}{c} \text{6} \\ \lambda \end{array}$

Vou - Vou

This section is small because the melody rarely has two consecutive cadences on Vou.

1010 $\begin{array}{c} \text{6} \\ \lambda \end{array} \begin{array}{c} \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \end{array} \begin{array}{c} \text{6} \\ \lambda \end{array}$

Di - Vou

This section is also small because the melody in this mode does not move from Di to Vou in very many ways.

1010 $\begin{array}{c} \Delta \\ \rho \\ \text{1 0 1 0} \end{array} \begin{array}{c} \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \end{array} \begin{array}{c} \text{6} \\ \lambda \end{array}$

$\begin{array}{c} \Delta \\ \rho \\ \text{1 0 1 0} \end{array} \begin{array}{c} \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \end{array} \begin{array}{c} \text{6} \\ \lambda \end{array}$

$\begin{array}{c} \Delta \\ \rho \\ \text{1 0 1 0} \end{array} \begin{array}{c} \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \end{array} \begin{array}{c} \text{6} \\ \lambda \end{array}$

001001 $\begin{array}{c} \Delta \\ \rho \\ \text{0 0 1 0 0 1} \end{array} \begin{array}{c} \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \\ \text{— — — —} \end{array} \begin{array}{c} \text{6} \\ \lambda \end{array}$

Medial Cadences on Di

I) Accented on Last Syllable

Pa - Di

001	π q	— — —	Δ Di
		0 0 1	
	π q	— — —	Δ Di
		0 0 1	
0001	π q	— — — —	Δ Di
		0 0 0 1	
10001	π q	— — — —	Δ Di
		1 0 0 0 1	
010001	π q	— — — — —	Δ Di
		0 1 0 0 0 1	
100001	π q	— — — — —	Δ Di
		1 0 0 0 0 1	
110001	π q	— — — — —	Δ Di
		1 1 0 0 0 1	
X00001	π q	— — — — —	Δ Di
		X 0 0 0 0 1	
0010001	π q	— — — — — —	Δ Di
		0 0 1 0 0 0 1	
	π q	— — — — — —	Δ Di
		0 0 1 0 0 0 1	
01000001	π q	— — — — — — —	Δ Di
		0 1 0 0 0 0 0 1	
00010001	π q	— — — — — — —	Δ Di
		0 0 0 1 0 0 0 1	



Fourth Mode - Sticheraric

010001

010X0X

010001

0100X0X

J) Accented on Second to Last Syllable

Pa - Di

10 $\pi_q \frac{\text{c} \quad \text{r}}{1} \text{---} \frac{\text{c}}{0} \Delta_{\text{c}}$

$\pi_q \frac{\text{c}}{1} \frac{\text{c}}{0} \Delta_{\text{c}}$

$\pi_q \frac{\text{c} \quad \text{c}}{1} \frac{\text{c}}{0} \Delta_{\text{c}}$

$\pi_q \frac{\text{c}}{1} \text{---} \frac{\text{c}}{0} \Delta_{\text{c}}$

010 $\pi_q \frac{\text{r}}{0} \text{---} \frac{\text{r}}{1} \text{---} \frac{\text{c}}{0} \Delta_{\text{c}}$

$\frac{\text{c}}{0} \Delta_{\text{c}}$

$\pi_q \frac{\text{r}}{0} \text{---} \frac{\text{r}}{1} \text{---} \frac{\text{c}}{0} \Delta_{\text{c}}$

$\pi_q \frac{\text{r}}{0} \text{---} \frac{\text{r}}{1} \text{---} \frac{\text{c}}{0} \Delta_{\text{c}}$

$\pi_q \frac{\text{r}}{0} \frac{\text{c}}{1} \text{---} \frac{\text{r}}{0} \Delta_{\text{c}}$

$\pi_q \frac{\text{r}}{0} \frac{\text{c}}{1} \text{---} \frac{\text{c}}{0} \Delta_{\text{c}}$

$\pi_q \frac{\text{r}}{0} \text{---} \frac{\text{c}}{1} \text{---} \frac{\text{c}}{0} \Delta_{\text{c}}$

0010 $\pi_q \frac{\text{r}}{0} \text{---} \frac{\text{r}}{0} \frac{\text{c}}{1} \text{---} \frac{\text{c}}{0} \Delta_{\text{c}}$

0010 $\pi_q \frac{\text{r}}{0} \text{---} \frac{\text{r}}{0} \frac{\text{c}}{1} \frac{\text{c}}{0} \Delta_{\text{c}}$

X0010 $\pi_q \frac{\text{r}}{X} \frac{\text{c}}{0} \text{---} \frac{\text{r}}{0} \frac{\text{c}}{1} \frac{\text{c}}{0} \Delta_{\text{c}}$

Fourth Mode - Sticheraric

100010 $\begin{matrix} \overset{6}{\lambda} \\ \text{1 0 0 0 1 0} \end{matrix} \overset{\Delta}{\text{A}}$

$\begin{matrix} \overset{6}{\lambda} \\ \text{1 0 0 0 1 0} \end{matrix} \overset{\Delta}{\text{A}}$

0010010 $\begin{matrix} \overset{6}{\lambda} \\ \text{0 0 1 0 0 1 0} \end{matrix} \overset{\Delta}{\text{A}}$

00010010 $\begin{matrix} \overset{6}{\lambda} \\ \text{0 0 0 1 0 0 1 0} \end{matrix} \overset{\Delta}{\text{A}}$

Di - Di

10 $\begin{matrix} \overset{\Delta}{\text{A}} \\ \text{1 0} \end{matrix} \overset{\Delta}{\text{A}}$

$\begin{matrix} \overset{\Delta}{\text{A}} \\ \text{1 0} \end{matrix} \overset{\Delta}{\text{A}}$

$\begin{matrix} \overset{\Delta}{\text{A}} \\ \text{1 0} \end{matrix} \overset{\Delta}{\text{A}}$

$\begin{matrix} \overset{\Delta}{\text{A}} \\ \text{1 0} \end{matrix} \overset{\Delta}{\text{A}}$

010 $\begin{matrix} \overset{\Delta}{\text{A}} \\ \text{0 1 0} \end{matrix} \overset{\Delta}{\text{A}}$ $\begin{matrix} \text{0} \end{matrix}$

$\begin{matrix} \overset{\Delta}{\text{A}} \\ \text{0 1 0} \end{matrix} \overset{\Delta}{\text{A}}$

$\begin{matrix} \overset{\Delta}{\text{A}} \\ \text{0 1 0} \end{matrix} \overset{\Delta}{\text{A}}$

$\begin{matrix} \text{0} \\ \text{0} \end{matrix}$

$\begin{matrix} \overset{\Delta}{\text{A}} \\ \text{0 1 0} \end{matrix} \overset{\Delta}{\text{A}}$ $\begin{matrix} \text{1 0} \end{matrix}$

Fourth Mode - Sticheraric

0010		
X010		
10010		
X0010		
00010		
100010		

Fourth Mode - Sticheraric

010010

0100010

0010010

00010010

Fourth Mode - Sticheraric

K) Accented on Third to Last Syllable

Pa - Di

100		0010X	
00100			
100100			
10010X			
0100100			
00100100			

Vou - Di

100			
101			
0100			
0101			
10100			
010100			

Fourth Mode - Sticheraric

1 0 0

000100 Δ 0 0 0 1 0 0 Δ

0010100 Δ 0 0 1 0 1 0 0 Δ

0100100 Δ 0 1 0 0 1 0 0 Δ 0 0

1000100 Δ 1 0 0 0 1 0 0 Δ

1 0

1 0 0

1 0 0

1 0

1000100 Δ 1 0 0 0 1 0 0 Δ

00100100 Δ 0 0 1 0 0 1 0 0 Δ

0 0

Δ 0 0 1 0 0 1 0 0 Δ

01000100 Δ 0 1 0 0 0 1 0 0 Δ

Fourth Mode - Sticheraric

L) Accented on Fourth to Last Syllable

Pa - Di

1001	π Δ δ	
	π Δ δ	
1010	π Δ δ	
01010	π Δ δ	
01001	π Δ δ	 Δ δ
	π Δ δ	
	π Δ δ	 Δ δ
001001	π Δ δ	
101001	π Δ δ	
0001001	π Δ δ	
0101001	π Δ δ	
010001001	π Δ δ	

Vou - Di

Fourth Mode - Sticheraric

1001

$\overset{6}{\lambda} \overset{\Delta}{\delta} \begin{array}{c} \text{U} \text{---} \text{U} \\ 1 \ 0 \ 0 \ 1 \end{array} \overset{\Delta}{\delta}$

$\overset{6}{\lambda} \overset{\Delta}{\delta} \begin{array}{c} \text{U} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 1 \quad \quad 0 \quad \quad 0 \quad \quad 1 \end{array} \overset{\Delta}{\delta}$

01010

$\overset{6}{\lambda} \overset{\Delta}{\delta} \begin{array}{c} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 0 \ 1 \ 0 \ 1 \ 0 \end{array} \overset{\Delta}{\delta}$

001001

$\overset{6}{\lambda} \overset{\Delta}{\delta} \begin{array}{c} \text{---} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 0 \ 0 \ 1 \ 0 \ 0 \ 1 \end{array} \overset{\Delta}{\delta}$

0101001

$\overset{6}{\lambda} \overset{\Delta}{\delta} \begin{array}{c} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 0 \ 1 \ 0 \ 1 \ 0 \ 0 \ 1 \end{array} \overset{\Delta}{\delta}$

0001001

$\overset{6}{\lambda} \overset{\Delta}{\delta} \begin{array}{c} \text{---} \text{---} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 0 \ 0 \ 0 \ 1 \ 0 \ 0 \ 1 \end{array} \overset{\Delta}{\delta}$

01001001

$\overset{6}{\lambda} \overset{\Delta}{\delta} \begin{array}{c} \text{---} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 0 \ 1 \ 0 \ 0 \ 1 \ 0 \ 0 \ 1 \end{array} \overset{\Delta}{\delta}$

Di - Di

100X

$\overset{\Delta}{\delta} \begin{array}{c} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 1 \ 0 \ 0 \ X \end{array} \overset{\Delta}{\delta}$

1001

$\overset{\Delta}{\delta} \begin{array}{c} \text{U} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 1 \quad \quad 0 \quad \quad 0 \quad \quad 1 \end{array} \overset{\Delta}{\delta}$

$\begin{array}{c} \text{U} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 1 \quad \quad 0 \quad \quad 1 \end{array}$

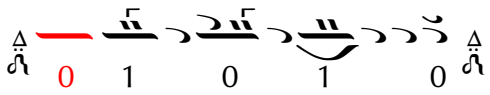
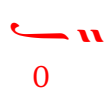
1010

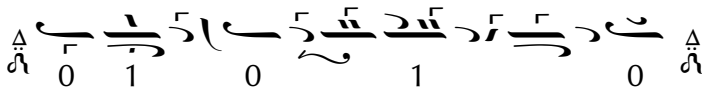
$\overset{\Delta}{\delta} \begin{array}{c} \text{U} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 1 \quad \quad 0 \quad \quad 1 \quad \quad 0 \end{array} \overset{\Delta}{\delta}$

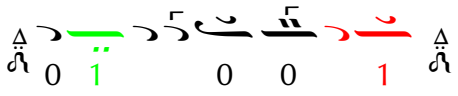
$\overset{\Delta}{\delta} \begin{array}{c} \text{U} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 1 \ 0 \ 1 \quad \quad 0 \end{array} \overset{\Delta}{\delta}$

$\overset{\Delta}{\delta} \begin{array}{c} \text{U} \text{---} \text{U} \text{---} \text{U} \text{---} \text{U} \\ 1 \quad \quad 0 \quad \quad 1 \quad \quad 0 \end{array} \overset{\Delta}{\delta}$

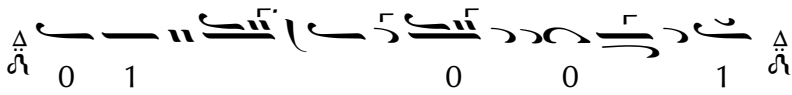
Fourth Mode - Sticheraric

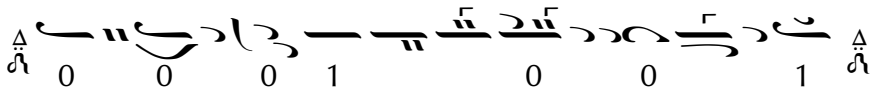
01010  



01001 



0001001 

Fourth Mode - Sticheraric

010

0010

10010

100010

Accented on third to last syllable:

0100

Fourth Mode - Sticheraric

000100

00010100

000100100

Accented on fourth to last syllable:

1001

1010

Fourth Mode - Sticheraric

$\overset{6}{\lambda}$
 $\overset{\alpha}{\lambda}$

01001

$\overset{\Delta}{\lambda}$
 $\overset{\nu'}{\lambda}$

01010

$\overset{\Delta}{\lambda}$
 $\overset{\alpha}{\lambda}$

01001010

$\overset{\Delta}{\lambda}$
 $\overset{\alpha}{\lambda}$

N) Medial Cadences on Low Di

Accented on last syllable:

(Use a formula ending in 100)

Accented on second to last syllable:

0010 π
 $\overset{q}{\underset{0}{\curvearrowright}} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{1}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{q}{\underset{0}{\curvearrowright}} \overset{x}{\curvearrowright}$

π
 $\overset{q}{\underset{0}{\curvearrowright}} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{1}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{\Delta}{\underset{0}{\curvearrowright}}$

11010 π
 $\overset{q}{\underset{1}{\curvearrowright}} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{1}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{\Delta}{\underset{0}{\curvearrowright}}$

10010 π
 $\overset{q}{\underset{1}{\curvearrowright}} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{1}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{\Delta}{\underset{0}{\curvearrowright}}$

Accented on third to last syllable:

X010X π
 $\overset{q}{\underset{X}{\curvearrowright}} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{1}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{\Delta}{\underset{0}{\curvearrowright}}$

$\overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{1}{\curvearrowright}$

$\overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{1}{\curvearrowright}$

$\overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{1}{\curvearrowright}$

100100 π
 $\overset{q}{\underset{1}{\curvearrowright}} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{\Delta}{\underset{1}{\curvearrowright}}$

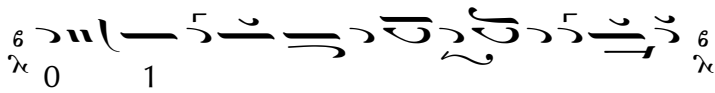
$\overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{5}{\curvearrowright} \overset{1}{\curvearrowright}$ $\overset{5}{\curvearrowright}$

Fourth Mode - Sticheraric

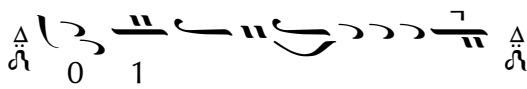
O) Old (slow) Sticheraric Formulae

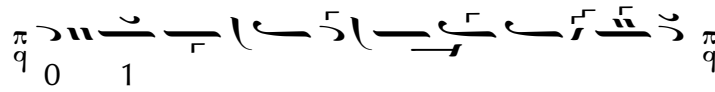
Accented on last syllable:

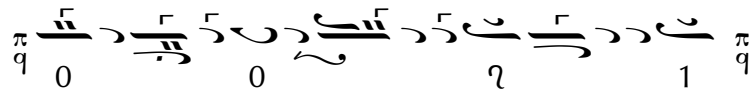
01 

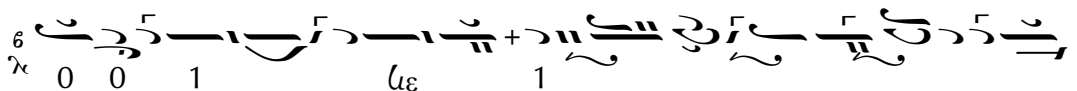
01 

01 

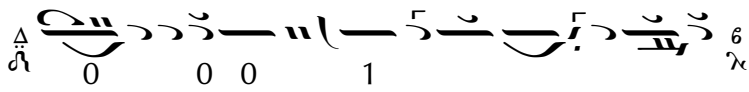
01 

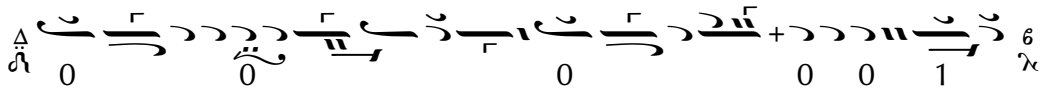
01 


001 

001 



0001 

0001 

10001 

0010001 

Fourth Mode - Sticheraric

10010 π_9 $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ π_9

10010 π_9 $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ π_9 $\frac{\Gamma}{1}$

010010 Δ $\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ Δ

100010 π_9 $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ Δ

100010 π_9 $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ π_9

0100010 Δ $\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ Δ

$\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ π_9

1000010 Δ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ Δ

$\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ π_9

1000010 Δ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{1}$ Δ

$\frac{\Gamma}{0}$ π_9

10000010 Δ $\frac{\Gamma}{1}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ $\frac{\Gamma}{0}$ Δ

Fourth Mode - Sticheraric

Accented on third to last syllable:

100 Δ πq

100 ϵ λ Δ

100 πq πq

πq

100 πq ϵ λ

100 πq Δ

100 πq πq

100 πq πq

100 πq πq

100 πq ϵ λ

100 Δ πq

100 Δ Δ

Fourth Mode - Sticheraric

100 $\frac{\pi}{9}$ 1 " 0 0 0 $\frac{\Delta}{9}$

100 $\frac{\Delta}{9}$ 1 0 0 $\frac{\nu}{9}$

100 $\frac{\Delta}{9}$ 1 0 0 $\frac{\pi}{9}$ 1

100 $\frac{\pi}{9}$ 1 0 1 0 0 $\frac{\pi}{9}$

101 $\frac{6}{\lambda}$ 1 0 2 1 $\frac{\Delta}{9}$

10X $\frac{\pi}{9}$ 1 0 2 X $\frac{\pi}{9}$

1

0100 $\frac{\Delta}{9}$ 0 1 0 0 1 0

$\frac{6}{\lambda}$ 0

0100 $\frac{\Delta}{9}$ 0 1 0 0 1 0 0 $\frac{\Delta}{9}$

0 1 0 0 $\frac{\Delta}{9}$

0 $\frac{\Delta}{9}$

0100 $\frac{\pi}{9}$ 0 1 0 0 1 0 0 $\frac{\pi}{9}$

0100 $\frac{\pi}{9}$ 0 1 0 0 $\frac{6}{\lambda}$

Fourth Mode - Sticheraric

π_9
 ρ 0 π_9

100100 π_9 1 0 0 1 ρ 0 ρ 0 π_9

100100 Δ 1 0 0 1 0 0 λ'

0100101 Δ 0 1 0 0 1 0

ρ 1 λ'

0010100 π_9 0 0 1 0 1 0 0 1 0 1 0 0

0100100 Δ 0 0 1

0100100 ρ 0 1 0 0 1

0100100 π_9 0 ρ 0 π_9

0100100 Δ 0 1 0 0 1 0

1000100 π_9 1 0 0 0 1 0

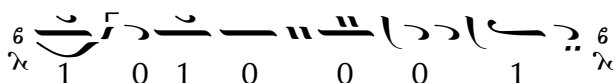
1000100 π_9 0

1000100 Δ 1 0 0 0 1 0

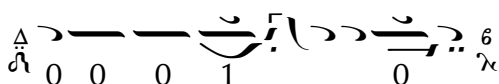
P) Final Cadences

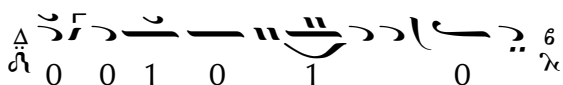
Accented on last syllable:

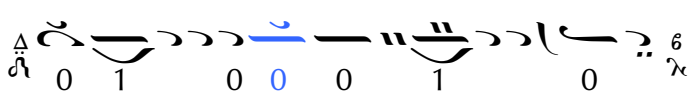
(Many formulae ending in 100, 10X, or X01 may also be appropriate)

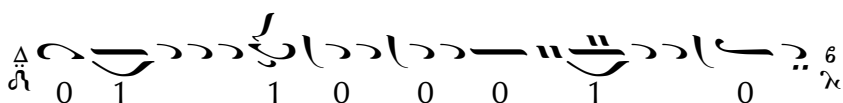
1010001 

Accented on second to last syllable:*

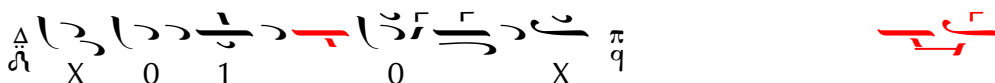
0100010 

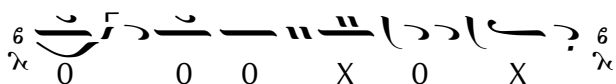
001010 

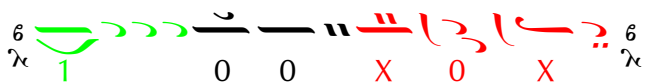
0100010 

01100010 

Accented on third to last syllable:

X010X 

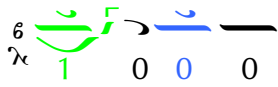
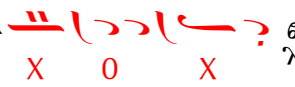


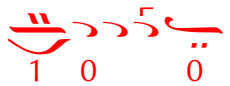
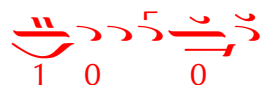

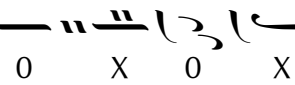
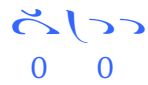
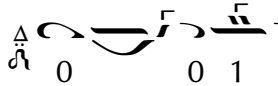

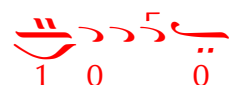
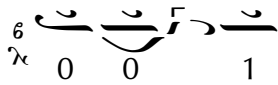
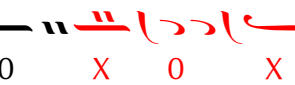
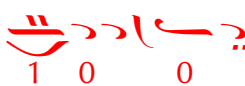
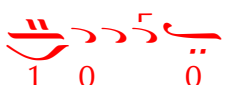
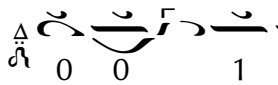
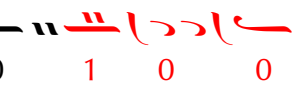

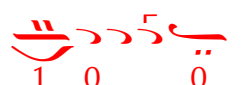


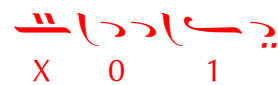


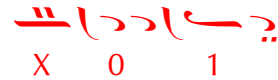
000X0X 

100X0X 



* Only four formulae in this section is accented on the second to last syllable because out of the dozens of sticheraric melodies we examined, we found only four that ended with a word accented on the second to last syllable. Nevertheless, by comparing them with the other formulae in this section, it is safe to deduce that the other formulae can be altered to accommodate phrases accented on the second to last syllable (or on the fourth to last syllable) merely by removing the second to last syllable in them.

Fourth Mode - Sticheraric

1000X0X	$\overset{6}{\lambda}$   $\overset{6}{\lambda}$	
	  	
		
0010X0X	$\overset{\Delta}{\lambda}$   $\overset{6}{\lambda}$	
0010100	$\overset{\Delta}{\lambda}$  	
		
0010X0X	$\overset{6}{\lambda}$   $\overset{6}{\lambda}$	
		
		
0010100	$\overset{\Delta}{\lambda}$   $\overset{6}{\lambda}$	
		
		
01010X01	$\overset{\pi}{\lambda}$   $\overset{6}{\lambda}$	
01010X01	$\overset{\Delta}{\lambda}$   $\overset{6}{\lambda}$	

Fourth Mode - Sticheraric

01010100 $\overset{\Delta}{\underset{\lambda}{\text{d}}} \overset{\overset{6}{\lambda}}{\text{d}}$

010000101 $\overset{\overset{6}{\lambda}}{\text{d}}$

010X0X0X $\overset{\overset{6}{\lambda}}{\text{d}}$

001000X0X $\overset{\Delta}{\underset{\lambda}{\text{d}}} \overset{\overset{6}{\lambda}}{\text{d}}$

101000X0X $\overset{\overset{6}{\lambda}}{\text{d}}$

Accented on fourth to last syllable:

001010 $\overset{\Delta}{\underset{\lambda}{\text{d}}} \overset{\overset{6}{\lambda}}{\text{d}}$

10001001 $\overset{\overset{6}{\lambda}}{\text{d}}$

Fourth Mode - Sticheraric

Q) Final Cadences for Theotokia

01001

01001

100100

100100

1000100

1000100

1000101

1000101

Old (slow) Sticheraric Cadences for Theotokia:

100

100

00100

00100