

BYZANTINE MUSIC FORMULÆ

Second Mode - Sticheraric

Contents*

	<u>Initial Formulae</u>	
A) Initial Formulae: Di - Zo.....		96
B) Semi-initial Formulae: Zo - Di		97
	<u>Medial Formulae</u>	
C) Medial Cadences on Di.....		98
D) Medial Cadences on Vou.....		109
E) Medial Cadences on High Zo		113
F) Low Nee.....		114
1) Cadences on Ga:		114
2) Cadences on low Zo:.....		115
3) Cadences on Nee:		116
G) Bridges		118
H) Formulae with Fthoras		120
I) Old (slow) Sticheraric Formulae		122
	<u>Ending Formulae</u>	
J) Ending Formulae		140
1) Formulae found only near the end.....		140
2) Semi-final Cadences		140
3) Final Cadences		141
4) Other Final Cadences		142
K) Final Cadences for Theotokia		144

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

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

A) Initial Formulae: Di - Zo

(These formulae may also be used as medial formulae)

The following formulae are followed by the formulae on next page

101	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 1 0 1
X010	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ X 0 1 0
0100	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 0 1 0 0
	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ (medial formula) 0 1 0 0
1000	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 1 0 0 0
01010	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 0 1 0 1 0
01000	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 0 1 0 0 0
010010	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 0 1 0 0 1 0
100101	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 1 0 0 1 0 1
001001	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 0 0 1 0 0 1
1000101	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 1 0 0 0 1 0 1
10001001	$\Delta \overline{\text{u}} \overline{\text{u}} \overline{\text{u}} \overline{\text{z}}'$ 1 0 0 0 1 0 0 1

Second Mode - Sticheraric

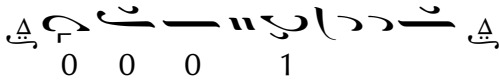
B) Semi-initial Formulae: Zo - Di

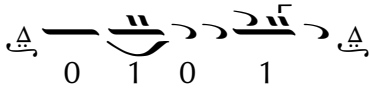
(to be preceded by any of the formulae in section A or E)

010		
010X		
0100		
00100		
100100		
0100100		

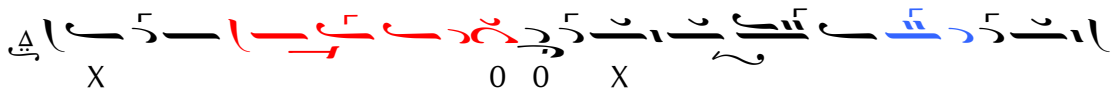
Second Mode - Sticheraric

0001 

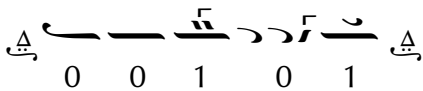


0101 

X001

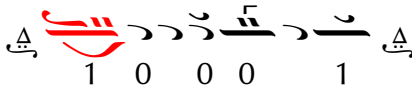







00101 

10001 

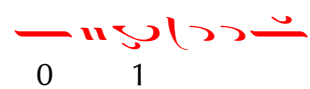
 

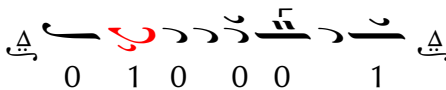

 

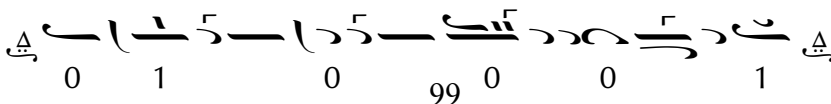
100001 



010001 





Second Mode - Sticheraric

01X001		

Accented on second to last syllable:

10		
----	--	--

--

--	--

--

--	--

--

010	
-----	--

--

--	--

--

--

Second Mode - Sticheraric

	 0 1 0	 1
	 0 1 0	 1
0010	 0 0 1 0	 0 0 1 0
00010	 0 0 0 1 0	 1 0
	 0 0 0 1 0	
10010	 1 0 0 1 0	 1 0
	 1 0 0 1 0	 1 0
	 1 0 0 1 0	 0
00X010	 0 0 X 0 1 0	
00X010	 0 0 X 0 1 0	 1
	 0 0 1 0 1 0	 1
010010	 0 1 0 0 1 0	
	 0 1 0 0 1 0	 0 1 1
	 0 1 0 0 1 0	 1

Second Mode - Sticheraric

100010	 1 0 0 0 1 0	 1 0
	 1 0 0 0 1 0	 1
	 1 0 0 0 1 0	 1 0
	 1 0 0 0 1 0	 1 0 0 0 1 0
	 1 0 0 0 1 0	
10X010	 1 0 X 0 1 0	 0
100X010	 1 0 0 X 0 1 0	
	 1 0 0 X 0 1 0	 1
	 1 0 0 X 0 1 0	
0010010	 0 0 1 0 0 1 0	 1
	 0 0 1 0 0 1 0	
1000010	 1 0 0 0 0 1 0	
00100010	 0 0 1 0 0 0 1 0	 1
	 0 0 1 0 0 0 1 0	
01000010	 0 1 0 0 0 0 1 0	

Second Mode - Sticheraric

0X01	 0 X 0 1	 0 1
0100	 0 1 0 0	 0 0
	 0 1 0 0	 1 0 0
	 0 1 0 1	
10100	 1 0 1 0 0	
	 1 0 1 0 0	
	 1 0 1 0 0	 1
	 1 0 1 0 0	 1 0
	 1 0 1 0 0	
	 1 0 1 0 0	
00100	 0 0 1 0 0	 1

Second Mode - Sticheraric

000100	 0 0 0 1 0 0	 1
100100	 1 0 0 1 0 X	 1 0 1 0
	 1 0 0 1 0 0	
	 1 0 0 1 0 0	
010100	 0 1 0 1 0 0	
	 0 1 0 1 0 0	
	 0 1 0 1 0 0	
X000100	 X 0 0 0 1 0 0	
0100100	 0 1 0 0 1 0 0	
	 0 1 0 0 1 0 0	 0
	 0 1 0 0 1 0 0	
1010100	 1 0 1 0 1 0 0	
1000100	 1 0 0 0 1 0 0	
1000101	 1 0 0 0 1 0 1	

Second Mode - Sticheraric

1000100

10010100

Accented on fourth to last syllable:

1000

1001

1X01

1010

1010

1010

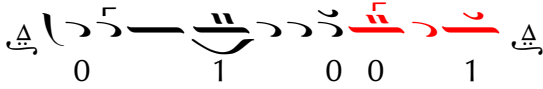
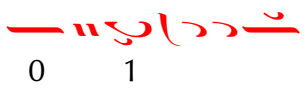
1010

1010

1010

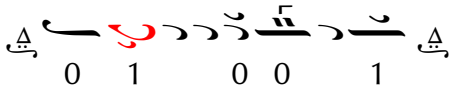

X00X

Second Mode - Sticheraric

01001  

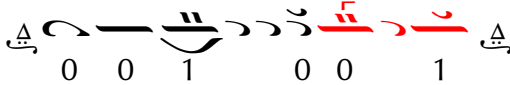
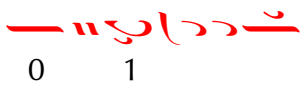


01010  

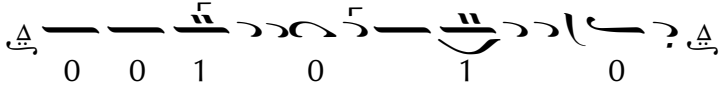
 

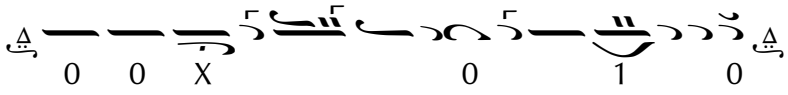
 

001001  



001010 

00X010 

Second Mode - Sticheraric

00X010	 0 0 X 0 1 0	 1
	 0 0 1 0 1 0	 1
101010	 1 0 1 0 1 0	
10X010	 1 0 X 0 1 0	 0
100X010	 1 0 0 X 0 1 0	
	 1 0 0 X 0 1 0	 1
	 1 0 0 X 0 1 0	
00100X010	 0 0 1 0 0 X 0 1 0	 1
0101001010	 0 1 0 1 0 0 0 1 0 1 0	

D) Medial Cadences on Vou

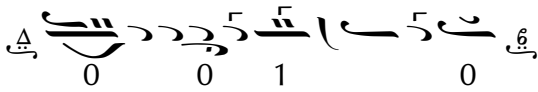
Accented on last syllable:

10001		
010001		
100001		
110001		


Second Mode - Sticheraric

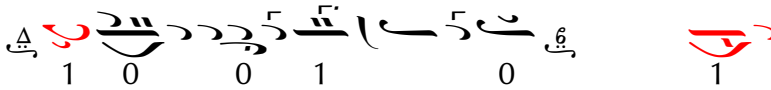
0100X0X 


Accented on second to last syllable:

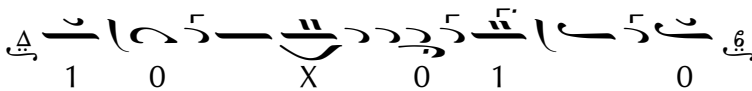
0010 

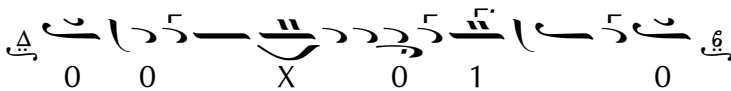
00010 

10010 




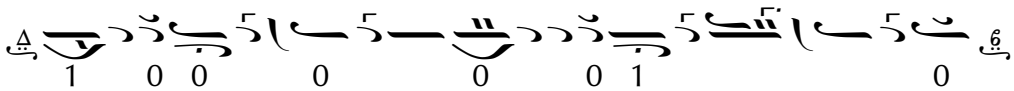
00X010 

10X010 

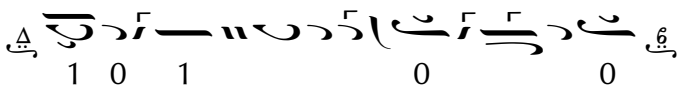
00X010 

0010010 

100X010 

10000010 

Accented on third to last syllable:

10100 

Second Mode - Sticheraric

010100

0100100

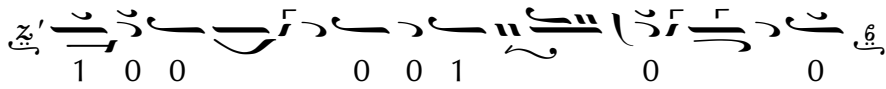
0100X0X


0110100

1000100

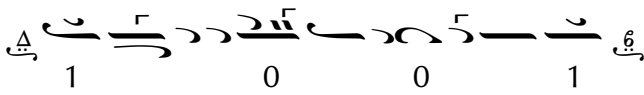
01000100

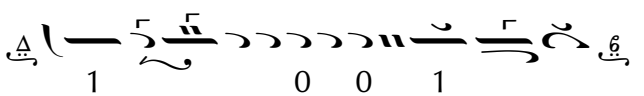
Second Mode - Sticheraric

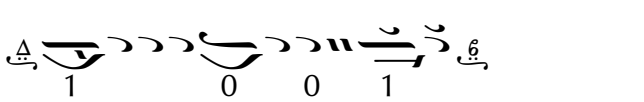
10000100 

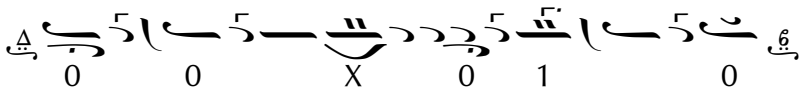
010000100 

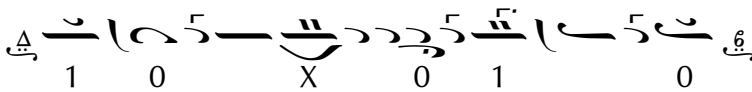
Accented on fourth to last syllable:

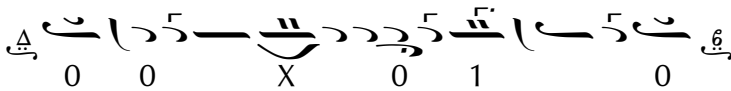
1001 

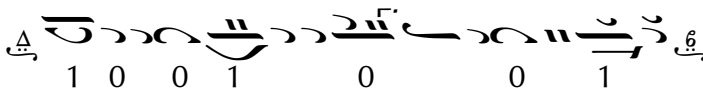


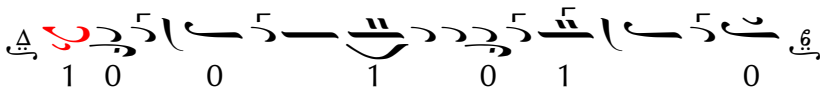


00X010 


10X010 

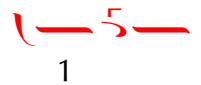
00X010 

1001001 


1001010 



01001001 

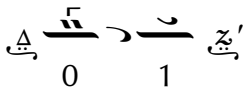

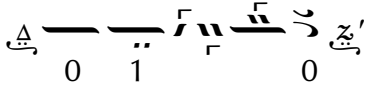
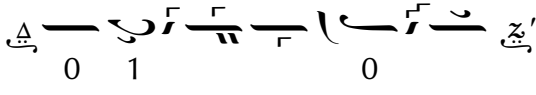
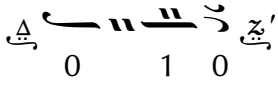
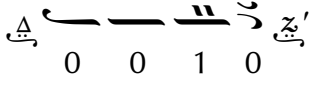
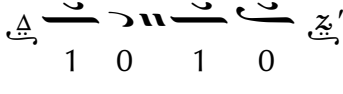
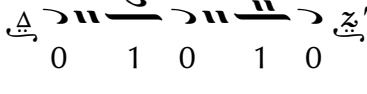
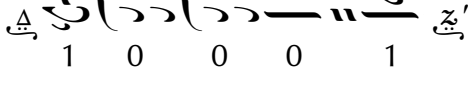
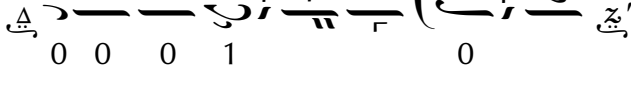
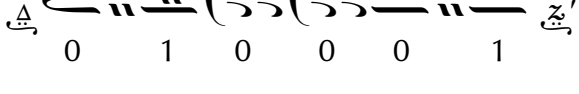

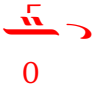




010001001 



E) Medial Cadences on High Zo

01		
10		
010		
		
		
0010		
1010		
01010		
10001		
00010		
010001		
		

(See section B for formulae from Zo to Di)

F) Low Nee

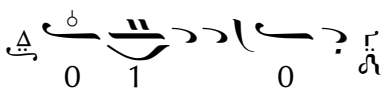

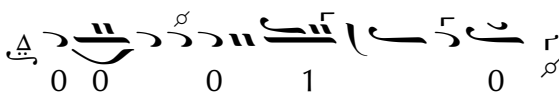
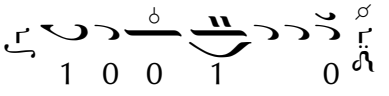
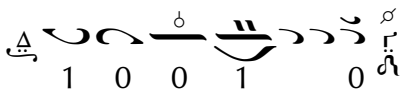
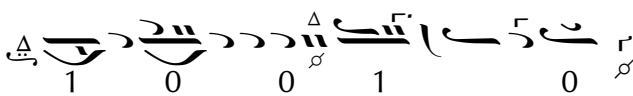
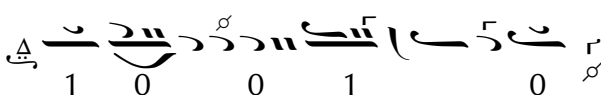
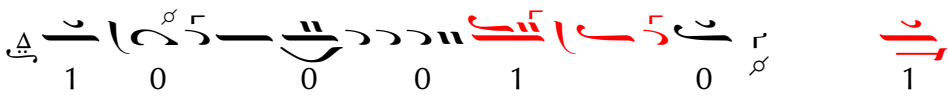
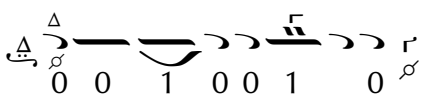
1) Cadences on Ga:

(usually followed by an ending on Nee or low Zo)

Accented on last syllable:

(use a formula ending in 100)

Accented on second to last syllable:

010	
0010	
00010	
10010	
	
	
	
100010	
0010010	

Second Mode - Sticheraric

Accented on third to last syllable:

100 100100

0100100

00100100

Accented on fourth to last syllable:

1010

01010

0101010

2) Cadences on low Zo:

(to be followed by an ending on Nee on next page)

00010 0

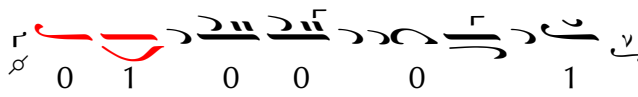

001010 0

00100010 0

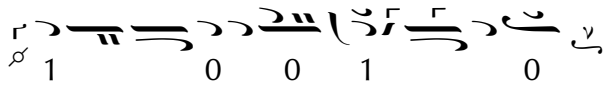
0100 0 (this formula is not followed by a cadence on Nee)

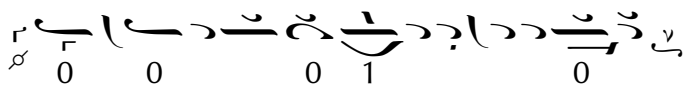
3) Cadences on Nee:

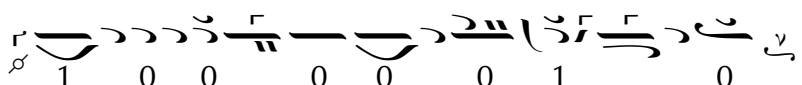
Accented on last syllable:

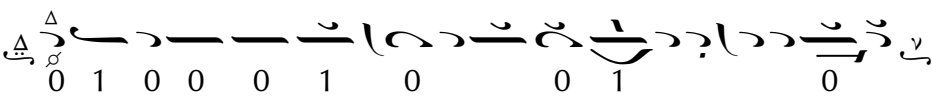
010001  

Accented on second to last syllable:

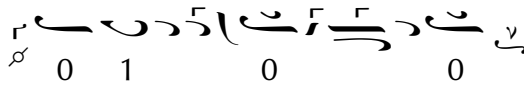
10010 


00010 

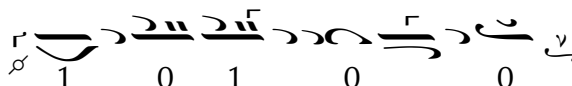
1000010 

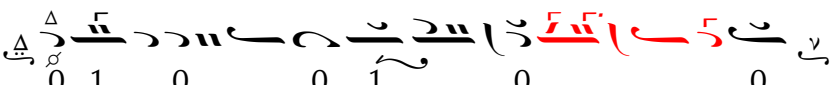

0100010010 



Accented on third to last syllable:

0100 

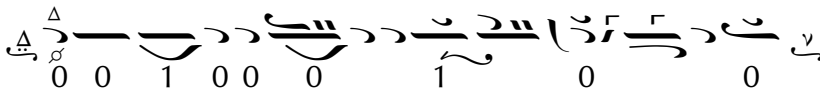
00100 

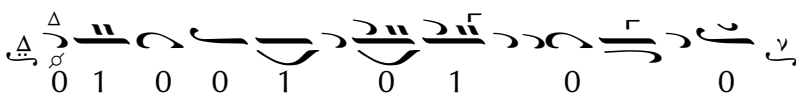
10100 

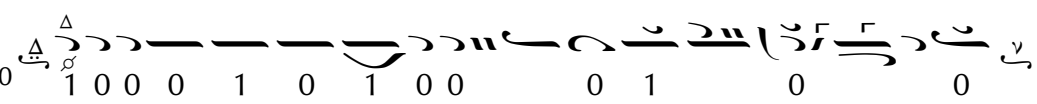
0100100  

Second Mode - Sticheraric

001000100 

010010100 

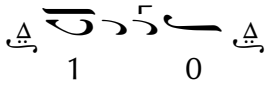
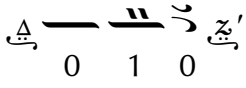


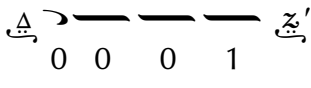

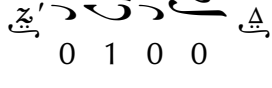
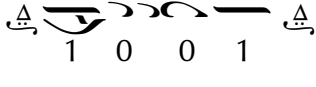
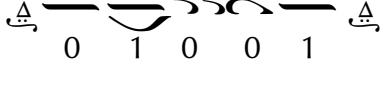
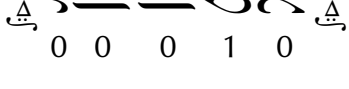
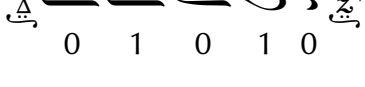
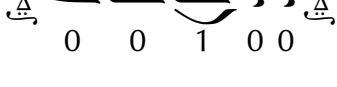

1000101000100 

Accented on fourth to last syllable:

(For lack of a better option, use a formula in sticheraric plagal second mode on page 538 or 539)

G) Bridges



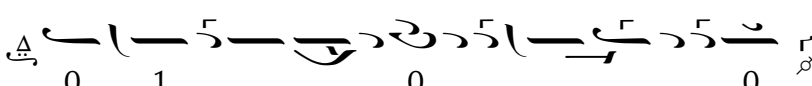
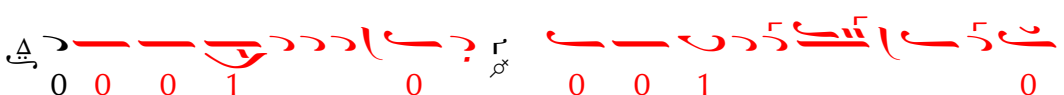
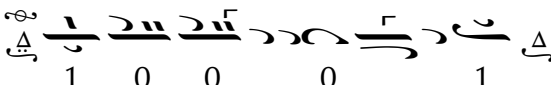
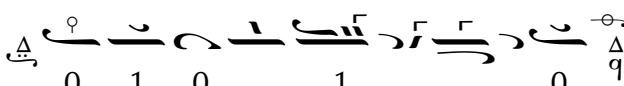

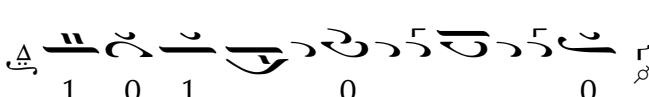
The following heirmological bridges represent only a fraction of the dozens of bridges permitted. These were selected simply as a reminder of some typical musical gestures of this mode.

10	
010	
100	
0100	
0001	
0101	
0100	
1001	
01001	
00010	
01010	
00100	
10100	

Second Mode - Sticheraric

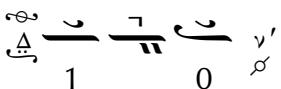
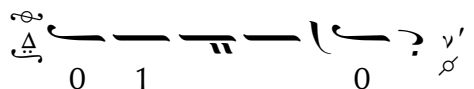
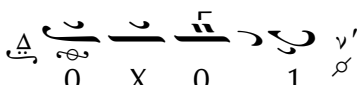
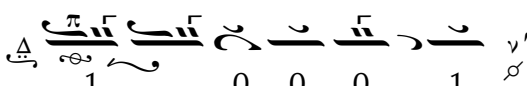
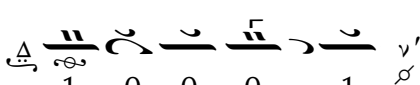
010001	
010100	
100010	
000100	
0010001	
0010010	
0100010	
0010010	
01010001	

H) Formulae with Fthoras

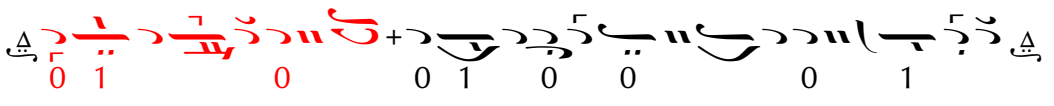
100	
0010	
0100	
00010	
10001	
01010	
0X100	
10100	

Formulae with fthores ending on high Nee:

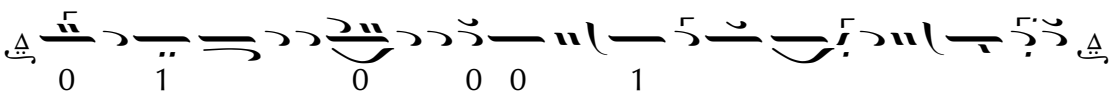
(to be followed by an ending on Di in next subsection)

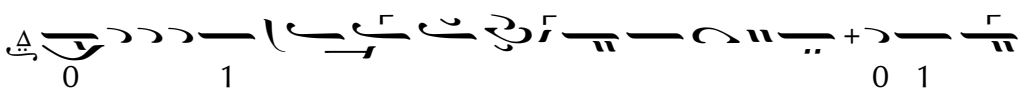
10		010	
0X01			
10001			
10001			

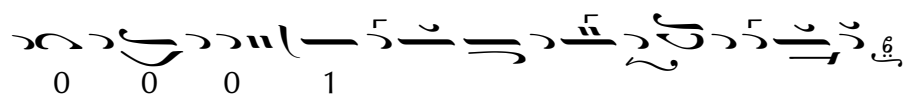
Second Mode - Sticheraric

010001  Musical notation for the sequence 010001. The notes are: 0 (F), 1 (G), 0 (F), 0 (E), 0 (D), 0 (C), 0 (B), 1 (A). The notes 0, 1, and 0 are highlighted in red.

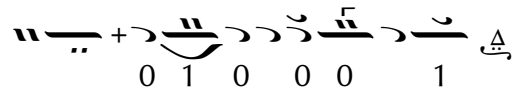
 Musical notation for the sequence 010001. The notes are: 0 (F), 1 (G), 0 (F), 0 (E), 0 (D). The notes 0, 1, and 0 are highlighted in red.

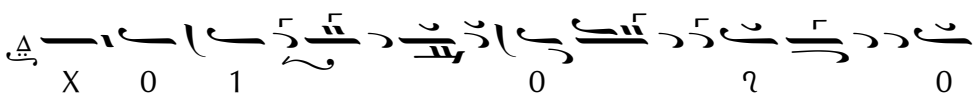
010001  Musical notation for the sequence 010001. The notes are: 0 (F), 1 (G), 0 (F), 0 (E), 0 (D), 0 (C), 1 (B).

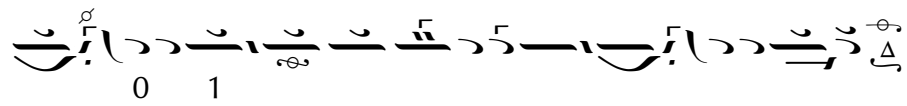
010001  Musical notation for the sequence 010001. The notes are: 0 (F), 1 (G), 0 (F), 0 (E), 0 (D), 0 (C), 1 (B), 0 (A), 1 (G).

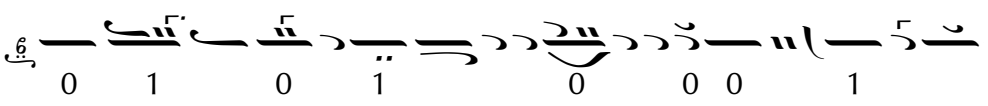
 Musical notation for the sequence 010001. The notes are: 0 (F), 0 (E), 0 (D), 1 (C).

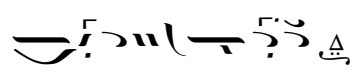
010001  Musical notation for the sequence 010001. The notes are: 0 (F), 1 (G), 0 (F), 0 (E), 0 (D), 0 (C), 1 (B).

 Musical notation for the sequence 010001. The notes are: 0 (F), 1 (G), 0 (F), 0 (E), 0 (D), 0 (C), 1 (B).

X010001  Musical notation for the sequence X010001. The notes are: X (F), 0 (E), 1 (D), 0 (C), 0 (B), 0 (A), 0 (G), 0 (F).


 Musical notation for the sequence X010001. The notes are: 0 (F), 1 (G).

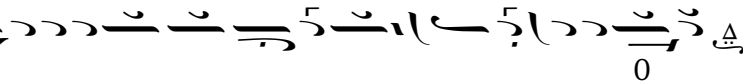
01010001  Musical notation for the sequence 01010001. The notes are: 0 (F), 1 (G), 0 (F), 1 (G), 0 (F), 0 (E), 0 (D), 0 (C), 1 (B).

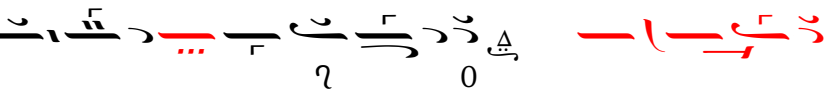
 Musical notation for the sequence 01010001. The notes are: 0 (F), 1 (G), 0 (F), 0 (E), 0 (D), 0 (C), 1 (B).

Second Mode - Sticheraric

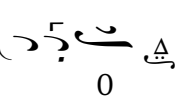
Accented on second to last syllable:

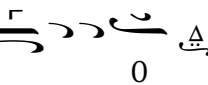
10 


10 

10 

10 

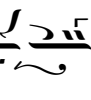
10 


10 

010 

010 

010

010 



Second Mode - Sticheraric

0010 Δ 0 2 0 1

Δ 0

0010 Δ 0 0 1 0

0010 Δ 0 0 1 0

X010 Δ X 2 0 1

2 0 2

X010 Δ X 2 0 1

2 0

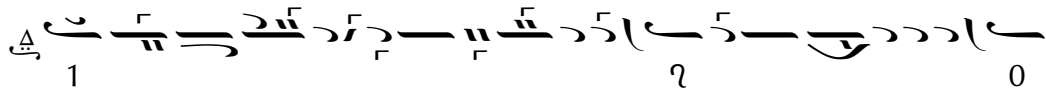
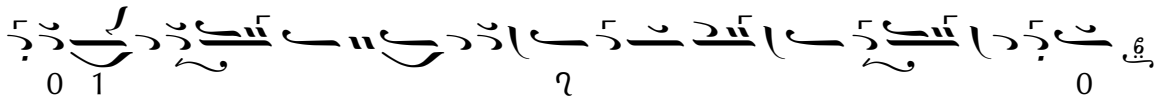

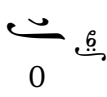
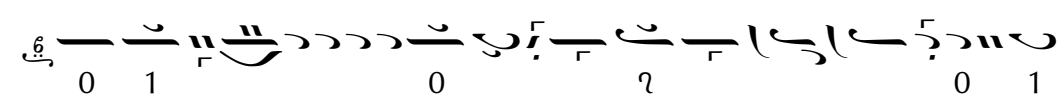
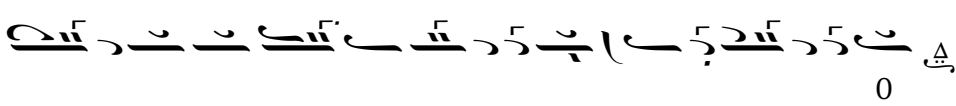
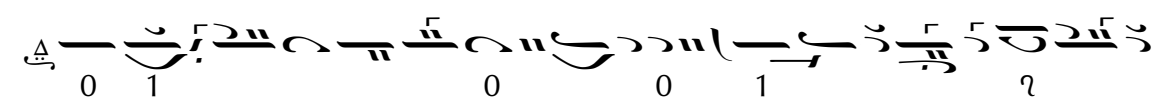
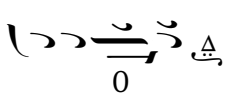
X0110 Δ X 2 0 1

1 0

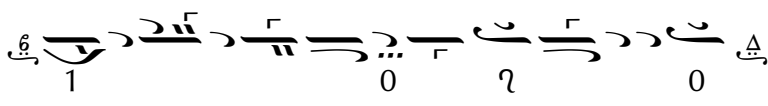
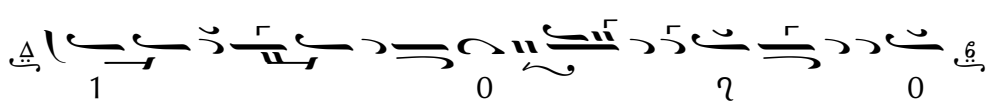
00010 Δ 0 0 0 1 2 0

0X010 Δ 0 0 0 1 0

Second Mode - Sticheraric

10010 

10010 

010010 

010010 


Accented on third to last syllable:

100 
100 

Second Mode - Sticheraric

100 Δ 1 0 2 0 Δ

100 Δ 1 0 2 0 Δ

جیاد دا 0

10X Δ 0 X X

X0X Δ X 0 X

جیاد دا جیاد دا

0100 Δ 0 1 0 2 0 Δ

جیاد دا 0

0100 Δ 0 1 0 2 0 Δ

0100 Δ 0 1 0 2 0 Δ

0100 Δ 0 1 0 0 Δ

0100 Δ 0 1 0 0 Δ

Second Mode - Sticheraric

00100 Δ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{1}{1}$

$\frac{0}{0}$ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{0}{0}$

Δ

X0100 Δ $\frac{X}{0}$ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{0}{0}$

01100 Δ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{0}{0}$ Δ

X0110 Δ $\frac{X}{0}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{1}{1}$

$\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$

010100 Δ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{1}{1}$

Δ $\frac{0}{0}$ $\frac{0}{0}$

100100 Δ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$

Δ $\frac{0}{0}$

100100 Δ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{1}{1}$ $\frac{0}{0}$ $\frac{0}{0}$ $\frac{0}{0}$

Second Mode - Sticheraric

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

$$100100 \quad \begin{array}{c} \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \quad \text{0} \\ \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \quad \text{0} \end{array}$$

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

$$100100 \quad \begin{array}{c} \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \quad \text{0} \\ \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \quad \text{0} \end{array}$$

$$\begin{array}{c} \text{0} \\ \text{0} \end{array}$$

$$100100 \quad \begin{array}{c} \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \\ \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \end{array}$$

$$\begin{array}{c} \text{0} \quad \text{0} \\ \text{0} \quad \text{0} \end{array}$$

$$01010100 \quad \begin{array}{c} \text{0} \quad \text{1} \quad \text{0} \quad \text{1} \quad \text{0} \quad \text{1} \\ \text{0} \quad \text{1} \quad \text{0} \quad \text{1} \quad \text{0} \quad \text{1} \end{array}$$

$$\begin{array}{c} \text{0} \quad \text{0} \\ \text{0} \quad \text{0} \end{array}$$

$$01010100 \quad \begin{array}{c} \text{0} \quad \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \quad \text{0} \quad \text{1} \quad \text{0} \\ \text{0} \quad \text{1} \quad \text{0} \quad \text{0} \quad \text{1} \quad \text{0} \quad \text{1} \quad \text{0} \end{array}$$

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

Second Mode - Sticheraric

Accented on fourth to last syllable:

X00X

1001

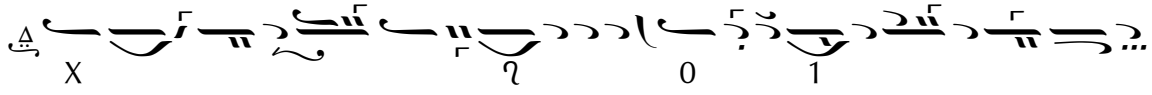
1010

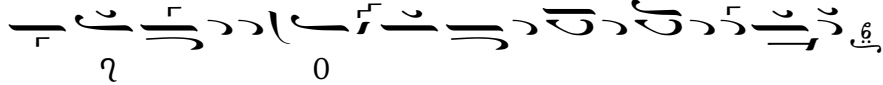
1010

X010

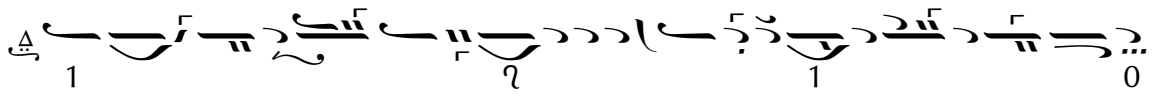
Second Mode - Sticheraric

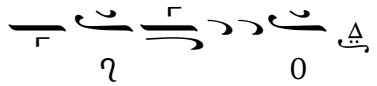
X010

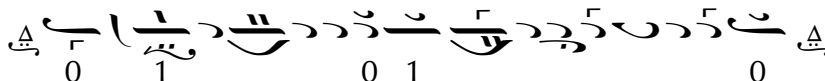


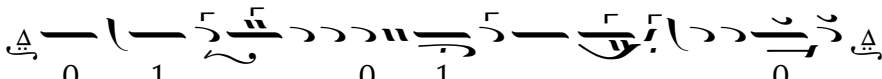


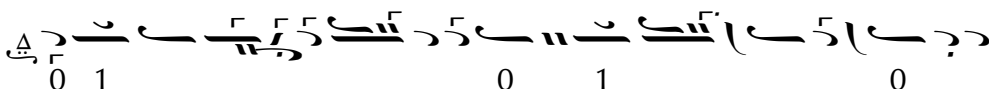
1100

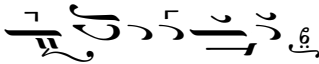




01010 

01010 

01010 



J) Ending Formulae

1) Formulae found only near the end:

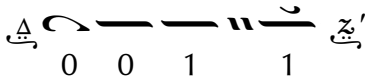
100	
00100	
10100	
0100100	

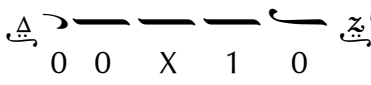
2) Semi-final Cadences


(to be followed by formulae in next section):

01	
001	
010	
0001	
1001	

Second Mode - Sticheraric

0011 

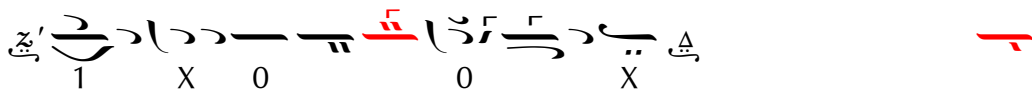
00X10 

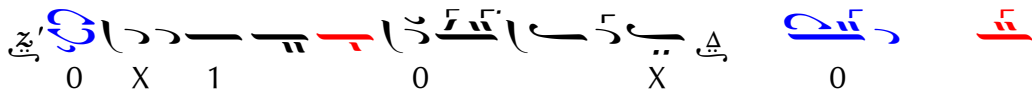
001001 

3) Final Cadences

(usually preceded by previous "semi-final" cadences):

Accented on last syllable:

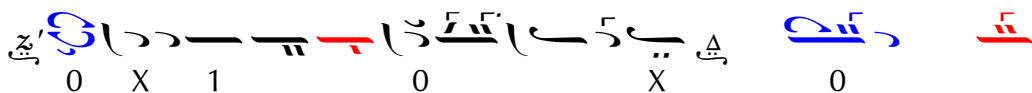
1X00X 

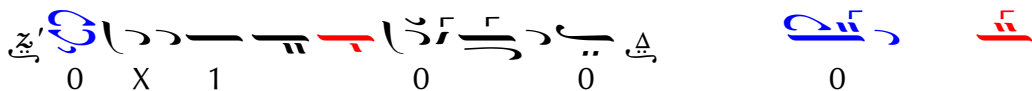
0X10X 

Accented on second to last syllable:

0XX10 

Accented on third to last syllable:

0X10X 

0X100 

Second Mode - Sticheraric

0XX10

Accented on fourth to last syllable:

0X10X

0X100

0XX10

1X00X

0X100X

4) Other Final Cadences:

(not preceded by a High Zo "semi-final" cadence):

Accented on last syllable:



01001

10010X

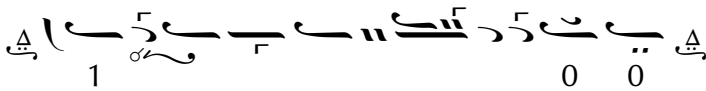
1000101

Second Mode - Sticheraric

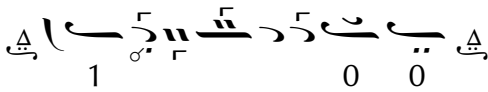
Accented on second to last syllable:

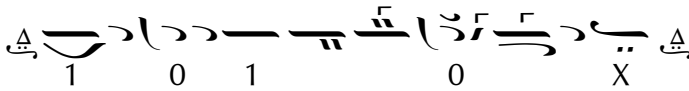
1010  


Accented on third to last syllable:


100 







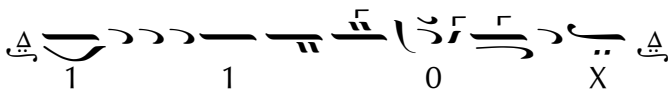
10100 

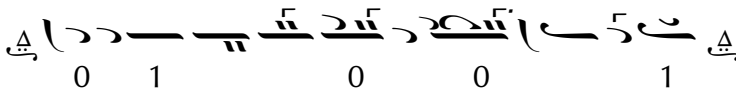
10010X 

1000101 

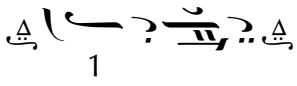
Accented on fourth to last syllable:

1010  

1100 

01001 

K) Final Cadences for Theotokia

1 

1 