

# 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

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\* 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)

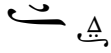
010		
010X		
0100		
00100		
100100		
0100100		

**C) Medial Formulae ending on Di**

(Most of these may also be used as initial formulae)

Note that most of these formulae from Di can also be used as formulae from Vou simply by changing the first character. For example, the first note in the third entry can be changed from an elaphron to an ison if the initial martyria is changed from Di to Vou.

Also note that when a cadence ends on Di with a klasma, the klasma may be replaced by kentemata or by an antikenoma with an aple. So the cadence:



may be written as:



or as:



in order to flow more smoothly into the next formula.

Accented on last syllable:

01      0      1

101      1      0      1

001      0      0      1

X01

X      0      X

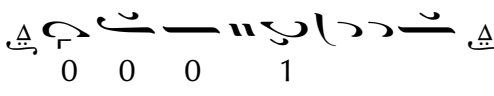


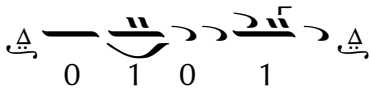
0X01      0      X      0      1

0      1

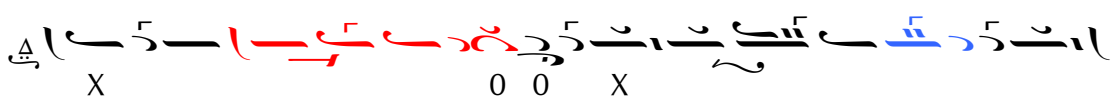
Second Mode - Sticheraric

0001 

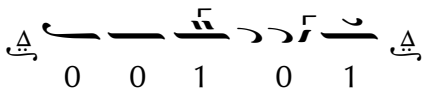



0101 

X001

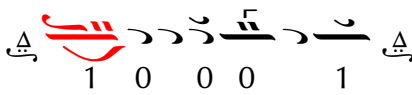


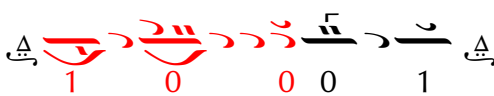



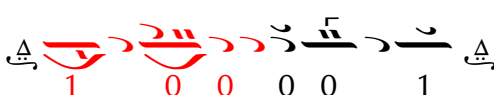

00101 

10001 

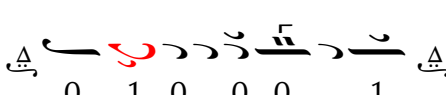

 

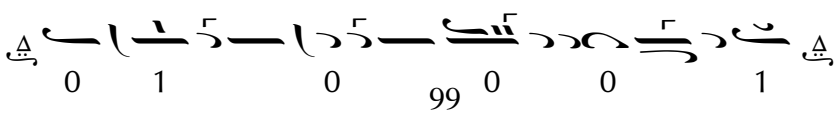
 

100001  

010001  



Second Mode - Sticheraric

01X001		

Accented on second to last syllable:

10		
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010	
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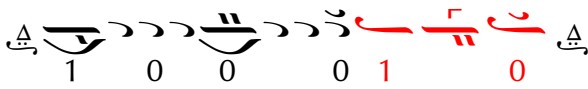



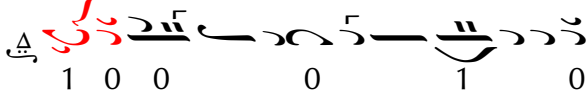

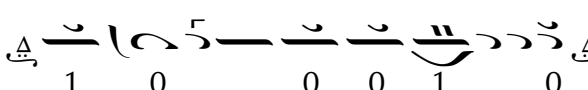
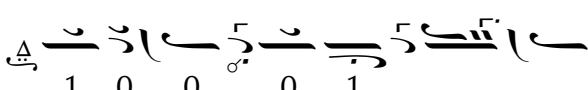


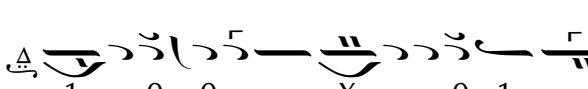
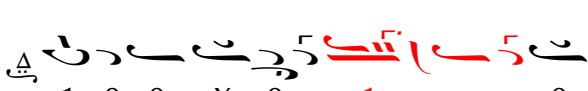

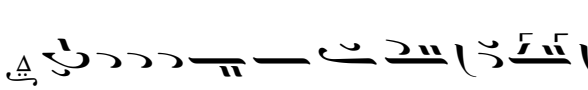
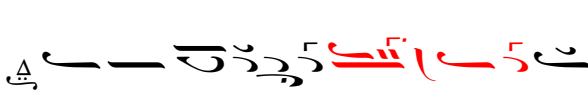



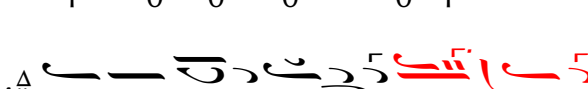

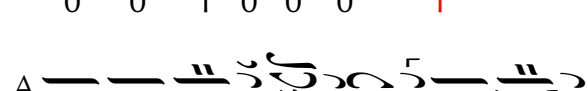
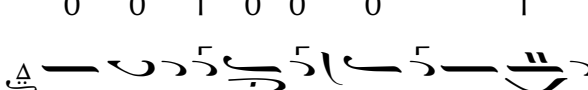
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Second Mode - Sticheraric

	 0 1 0	 1	
	 0 1 0	 1	
0010	 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
	 1 0 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	 1
	 0 1 0 0 1 0		

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	
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 0	
0101	 0 1 0 1	
10100	 1 0 1 0 0	
	 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 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

01001	 0 1 0 0 1	 0 1
	 0 1 0 0 1	 1 0
	 0 1 0 0 1	 0 1
	 0 1 0 0 1	 1
	 0 1 0 0 1	
	 0 1 0 0 1	 1 0
01010	 0 1 0 1 0	 1 0
	 0 1 0 1 0	 1
	 0 1 0 1 0	 1
001001	 0 0 1 0 0 1	 0 1
	 0 0 1 0 0 1	 0 1
	 0 0 1 0 0 1	
001010	 0 0 1 0 1 0	
00X010	 0 0 X 0 1 0	

Second Mode - Sticheraric

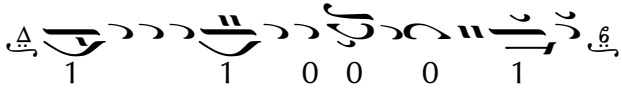
00X010	
101010	
10X010	
100X010	
00100X010	
0101001010	

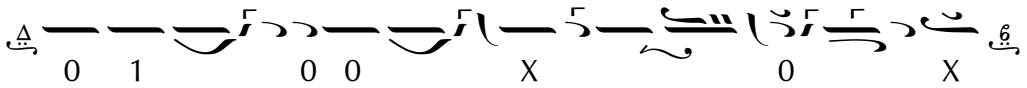
D) Medial Cadences on Vou

Accented on last syllable:

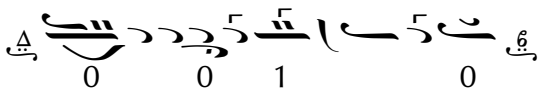
10001	 1 0 0 0 1	 0 0
	 1 0 0 0 1	 0 0
	 1 0 0 0 1	
	 1 0 0 0 1	
010001	 0 1 0 0 0 1	
	 0 1 0 0 0 1	 0 0
	 0 1 0 0 0 1	
	 0 1 0 0 0 1	
	 0 1 0 0 0 1	 0 1
	 0 1 0 0 0 1	
100001	 1 0 0 0 0 1	
	 1 0 0 0 0 1	

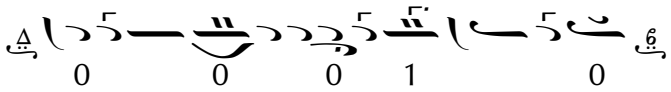
*Second Mode - Sticheric*

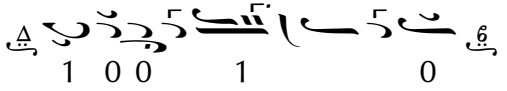
110001 


0100X0X 

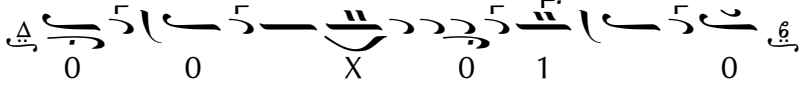
Accented on second to last syllable:

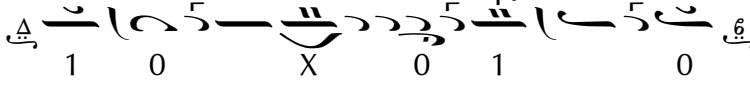
0010 

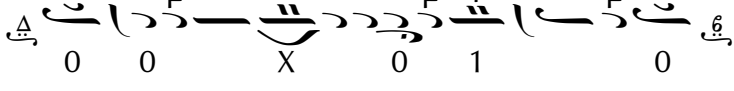
00010 

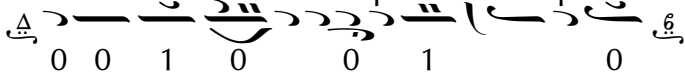
10010 



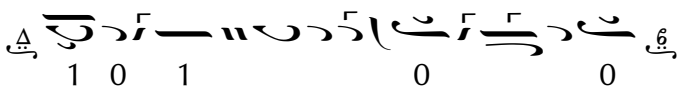
00X010 

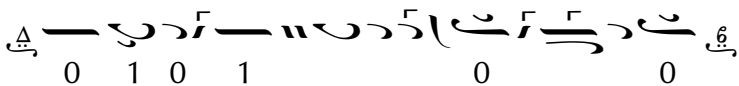
10X010 

00X010 

0010010 

Accented on third to last syllable:

10100 

010100 

Second Mode - Sticheraric

100100

1 0 0 1 0 0 1

0 0 1

0100100

0 1 0 0 1 0 0

0 1 0 0 1 0 0

0 1 0 0 1 0 0

0100X0X

0 1 0 0 X 0 X

0110100

0 1 1 0 1 0 0

1000100

1 0 0 0 1 0 0 1

1 0 0 0 1 0 0

01000100

0 1 0 0 0 1 0 0

0 1 0 0 0 1 0 0

0 1 0 0 1 0 0

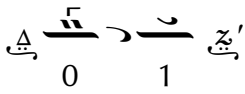

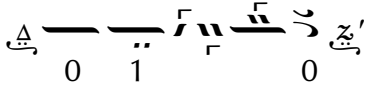
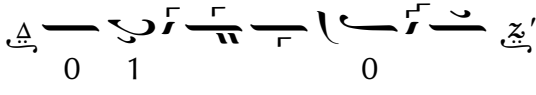
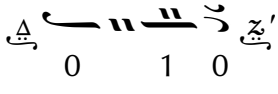
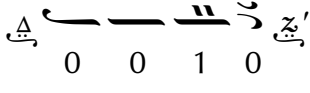
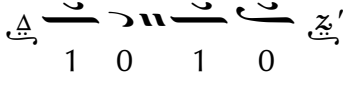
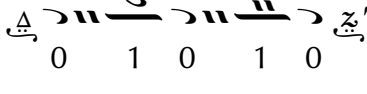
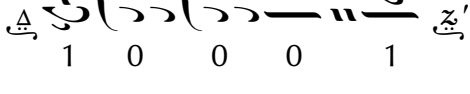
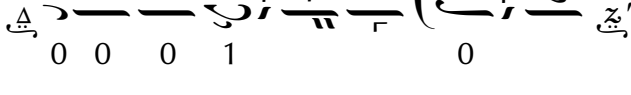
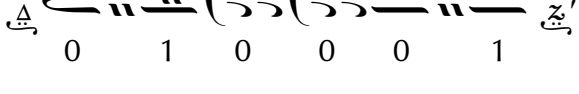

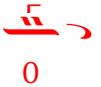
0 1 0 0 0 1 0 0

*Second Mode - Sticheraric*

Accented on fourth to last syllable:

1001	 1 0 0 1	
	 1 0 0 1	
	 1 0 0 1	
00X010	 0 0 X 0 1 0	
10X010	 1 0 X 0 1 0	
00X010	 0 0 X 0 1 0	
1001010	 1 0 0 1 0 1 0	 1
01001001	 0 1 0 0 1 0 0 1	
	 0 1 0 0 1 0 0 1	
010001001	 0 1 0 0 0 1 0 0 1	
	 0 1 0 0 0 1 0 0 1	 1

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)

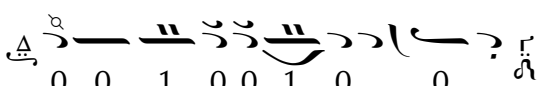
Accented on second to last syllable:

010	
0010	
00010	
10010	
100010	
0010010	

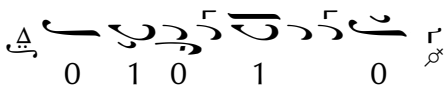
Accented on third to last syllable:

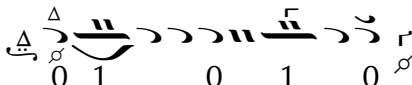
100      


0100100      

00100100      

Accented on fourth to last syllable:

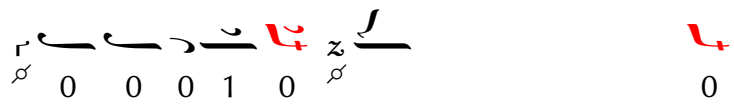
01010      

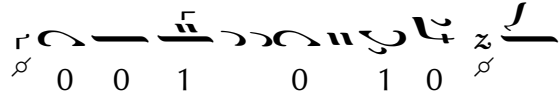
01010      

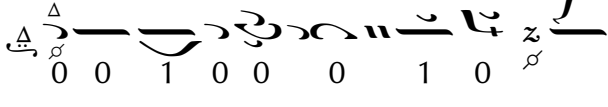
01010      

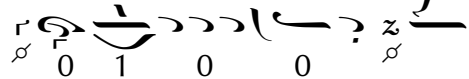
**2) Cadences on low Zo:**

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

00010      

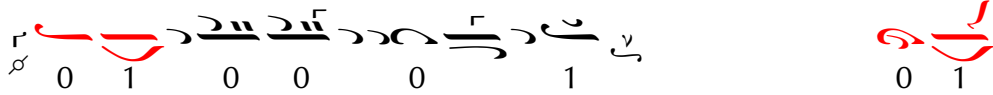
001010      

00100010      

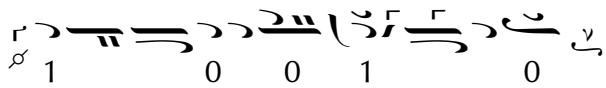
0100       (this formula is not followed by a cadence on Nee)

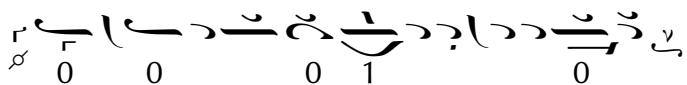
3) Cadences on Nee:

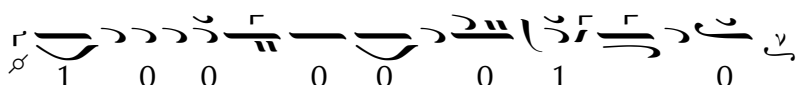
Accented on last syllable:

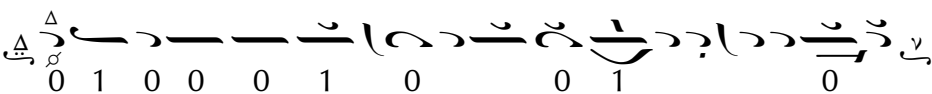
010001 

Accented on second to last syllable:

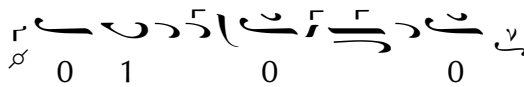
10010 


00010 

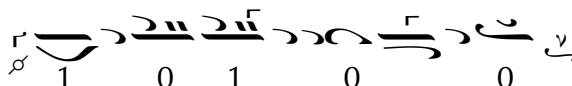
1000010 


0100010010 

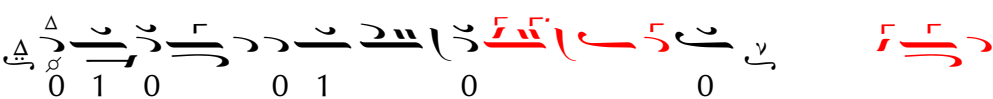
Accented on third to last syllable:

0100 

00100 

10100 

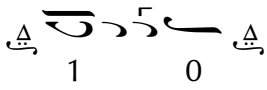
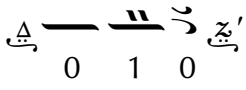


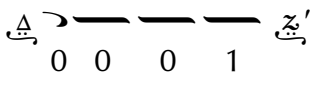


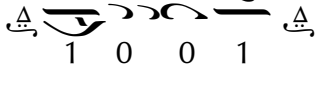

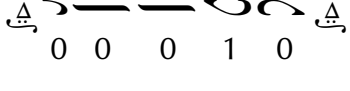
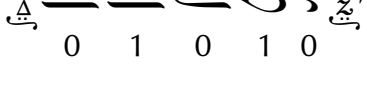
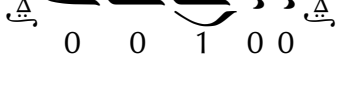

0100100 





**G) Bridges**



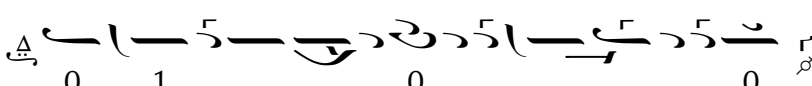
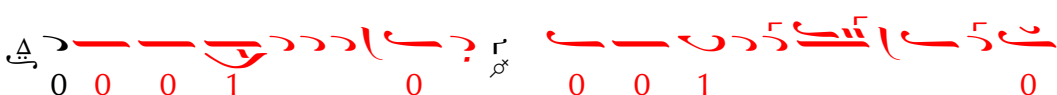
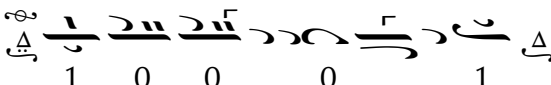
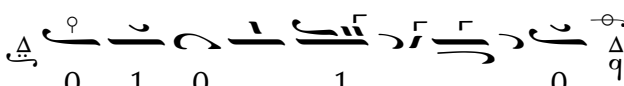

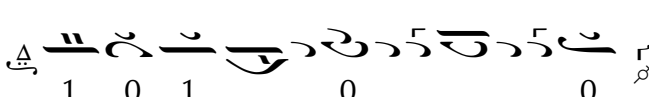
The following heirmological bridges represent only a fraction of the dozens of bridges permitted. These were selected simply as a reminder of some typical musical gestures of this mode.

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

*Second Mode - Sticheraric*

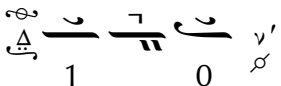

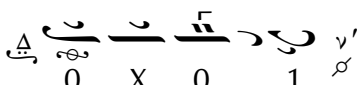
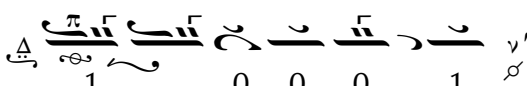
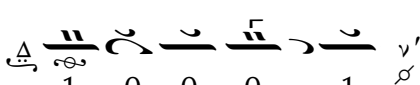
010001	
010100	
100010	
000100	
0010001	
0010010	
0100010	
0010010	
01010001	

H) Formulae with Fthoras

100	
0010	
0100	
00010	
10001	
01010	
0X100	
10100	

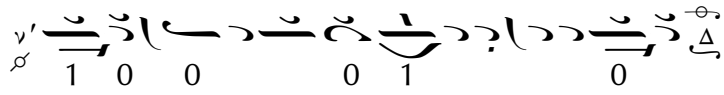
Formulae with fthores ending on high Nee:

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

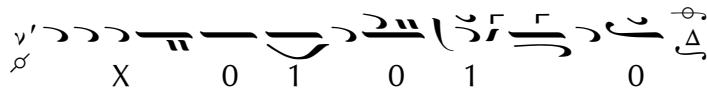
10		010	
0X01			
10001			
10001			

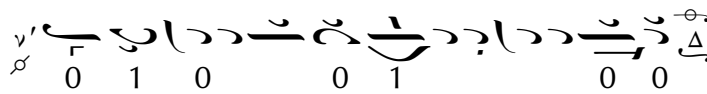
**Formulae with fthores Nee-Di:**

(to be preceded by an ending on high Nee in previous subsection)

100010 

0100010 

(1)X01010 

0100100 

I) Old (slow) Sticheraric Formulae

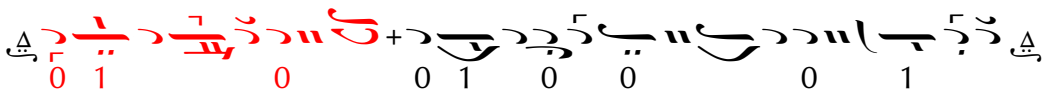
(Syllables after a cross are repeated syllables)

Accented on last syllable:

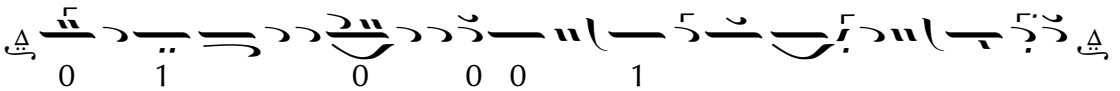
01		
01		
01		
01		
01		
01		
001		
001		
001		
001		
001		

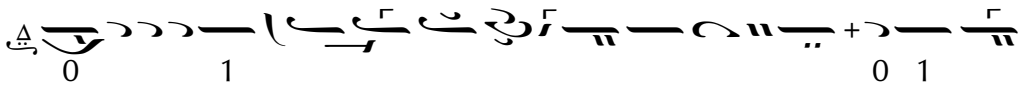


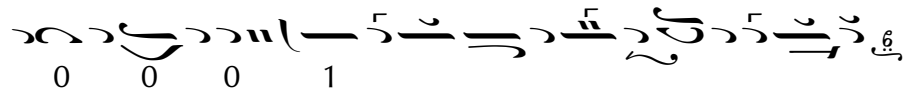
Second Mode - Sticheraric

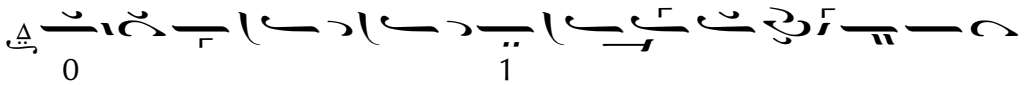
010001 

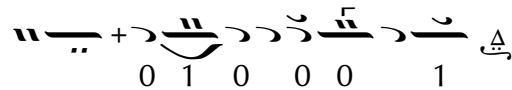


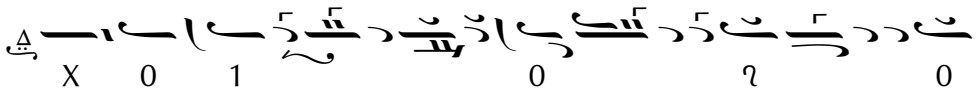
010001 

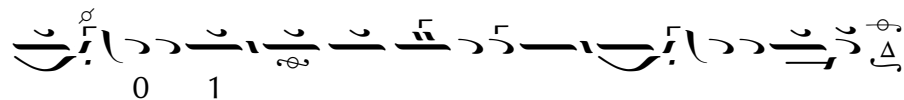
010001 




010001 



X010001 




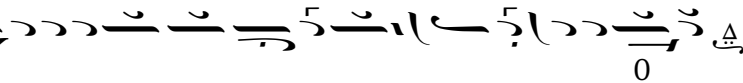
01010001 

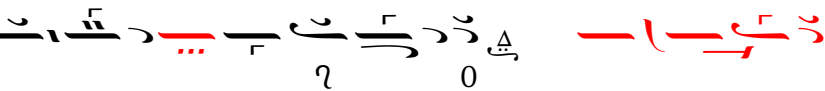


Second Mode - Sticheraric

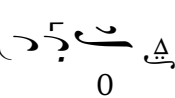
Accented on second to last syllable:

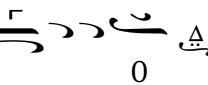
10 


10 

10 

10 

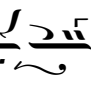
10 


10 

010 

010 

010 

010 





Second Mode - Sticheraric

0010  $\Delta$  0 2 0 1

$\Delta$  0

0010  $\Delta$  0 0 1 0

0010  $\Delta$  0 0 1 0

X010  $\Delta$  X 2 0 1

2 0 2

X010  $\Delta$  X 2 0 1

2 0

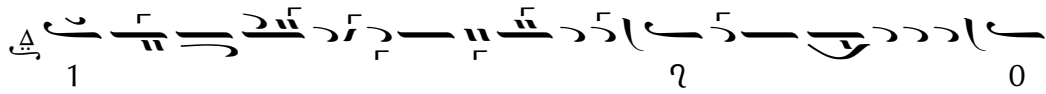
X0110  $\Delta$  X 2 0 1

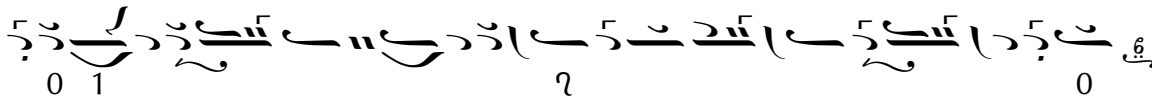
1 0


00010  $\Delta$  0 0 0 1 2 0

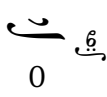
0X010  $\Delta$  0 0 0 1 0

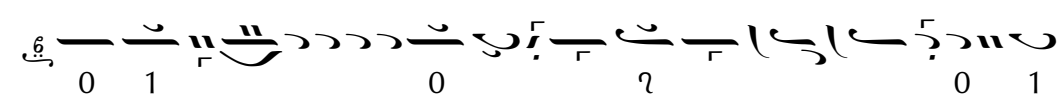
*Second Mode - Sticheraric*

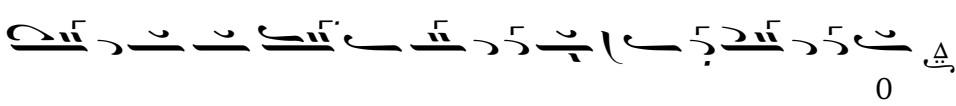
10010 

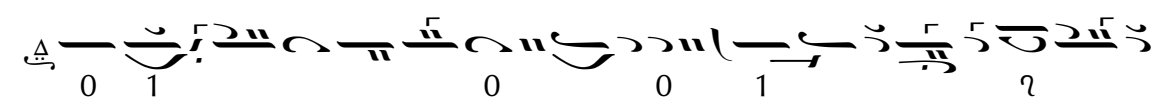


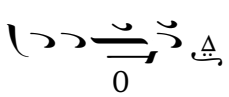
10010 



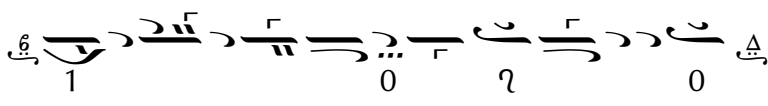
010010 

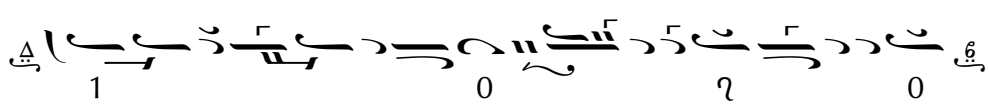


010010 



Accented on third to last syllable:

100 

100 



Second Mode - Sticheraric

100  $\Delta$  1 0 2 0  $\Delta$

100  $\Delta$  1 0 2 0  $\Delta$

جیاد دا 0

10X  $\Delta$  0 X X

X0X  $\Delta$  X 0 X

جیاد دا جیاد دا

0100  $\Delta$  0 1 0 2 0  $\Delta$

جیاد دا 0

0100  $\Delta$  0 1 0 2 0  $\Delta$

0100  $\Delta$  0 1 0 2 0  $\Delta$

0100  $\Delta$  0 1 0  $\Delta$

0100  $\Delta$  0 1 0 0  $\Delta$



Second Mode - Sticheraric

$\overset{\Delta}{\text{1}}$

0101  $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$

$\mu\varepsilon$   $\chi\varepsilon$   $\text{0}$

$\overset{\Delta}{\text{1}}$

00101  $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$

$\overset{\Delta}{\text{1}}$

00100  $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$

$\text{0}$   $\text{0}$

00100  $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$   $\overset{\Delta}{\text{0}}$

$\text{0}$   $\text{0}$

00100  $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$

00100  $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{1}}$   $\overset{\Delta}{\text{0}}$   $\overset{\Delta}{\text{0}}$

Second Mode - Sticheraric

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

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

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

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

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

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

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

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

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

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

$\frac{0}{0}$

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



Second Mode - Sticheraric

Accented on fourth to last syllable:

X00X

1001

1010

1010

X010









J) Ending Formulae

1) Formulae found only near the end:

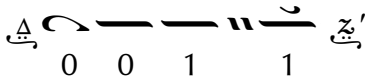
100	
00100	
10100	
0100100	

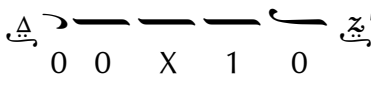
2) Semi-final Cadences


(to be followed by formulae in next section):

01	
001	
010	
0001	
1001	

*Second Mode - Sticheraric*

0011      

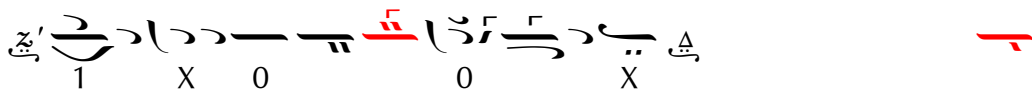
00X10      

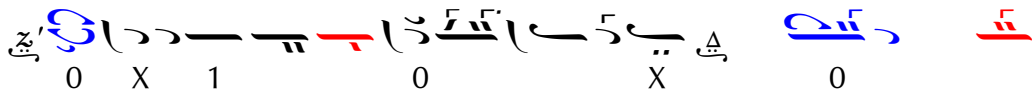
001001      

**3) Final Cadences**

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

Accented on last syllable:

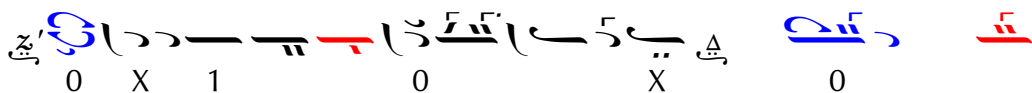
1X00X      

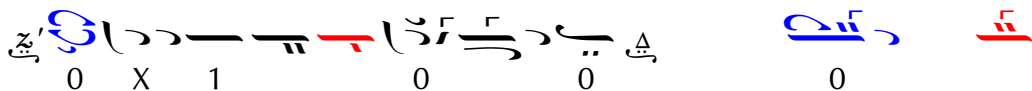
0X10X      

Accented on second to last syllable:

0XX10      

Accented on third to last syllable:

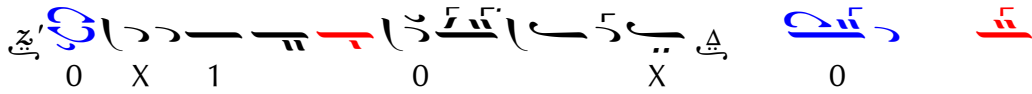
0X10X      

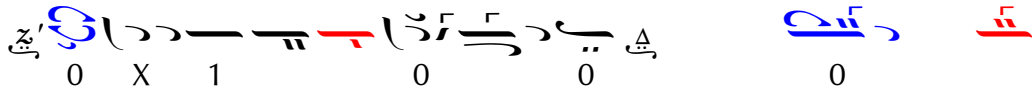
0X100      

*Second Mode - Sticheraric*

0XX10 

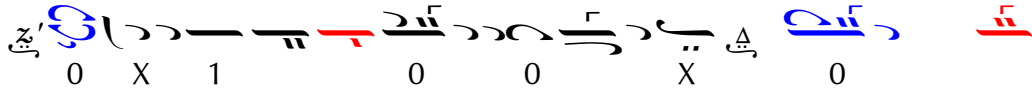
Accented on fourth to last syllable:

0X10X 

0X100 

0XX10 

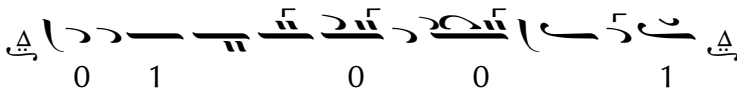
1X00X 

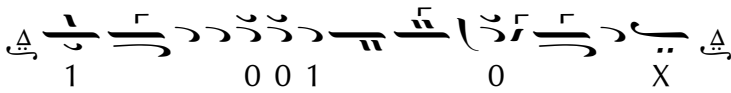
0X100X 


**4) Other Final Cadences:**

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

Accented on last syllable:



01001 

10010X 

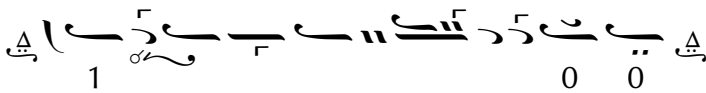
1000101 

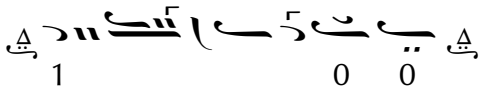
*Second Mode - Sticheraric*

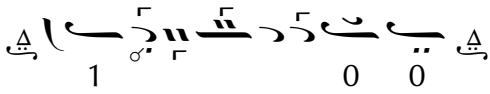
Accented on second to last syllable:


1010            

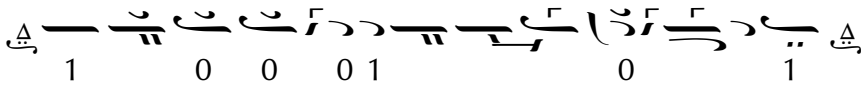
Accented on third to last syllable:

100      





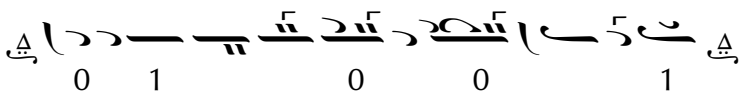


10010X      

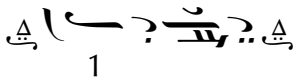
1000101      

Accented on fourth to last syllable:

1010            

01001      

**K) Final Cadences for Theotokia**

1      

1      