

# Nydanalyzer - SaLaTa

- Measure SaLaTa intervals
- See how Pythagorean tuning works
- Find the tones belonging to chord symbols
- Examine scales, keys and modes

The dots on the rim of the big disc represent Pythagorean pitches, showing how they correlate to the twelve equal-tempered pitches being represented by inwards extended ruler markings. There are 10 cents between each ruler marking.

The dots have been slightly adjusted so that they correspond to 53-ET. This means that the octave is divided into 53 equal steps. 53-ET is a very good approximation of the Pythagorean tuning system.

Tone names:

nD	dP	nR	dN	nM	nF	dV	nS	dG	nL	dB	nT
<i>C</i>	<i>Db</i>	<i>D</i>	<i>Eb</i>	<i>E</i>	<i>F</i>	<i>Gb</i>	<i>G</i>	<i>Ab</i>	<i>A</i>	<i>Bb</i>	<i>B</i>

Intervals:

n0	d1	n2	d3	n4	n5	d6	n7	d8	n9	dX	nY
<i>P1</i>	<i>m2</i>	<i>M2</i>	<i>m3</i>	<i>M3</i>	<i>P4</i>	<i>d5</i>	<i>P5</i>	<i>m6</i>	<i>M6</i>	<i>m7</i>	<i>M7</i>

To measure intervals: simply point n0 to a tone and read the intervals to other tones.

To find the tones of a key: point n0 to the beginning tone of the corresponding major scale, and read the tones at intervals n0 n2 n4 n5 n7 n9 nY.

The backside features the Spiral of Seven Steps (traditionally known as the circle/spiral of fifths). You can look at the pattern of a chord along the spiral, and then shift that pattern a certain number of steps clockwise or counter-clockwise to find the same chord transposed to another tone of your choice. If you want to transpose a piece from, let's say, nD to nS, then all you have to do is to move every tone or chord one step clockwise along the spiral.

To find the tones in the key of nD, pick the sequence nF nD nS nR nL nM nT from the Spiral of Seven Steps (these correlate to: subdominant, tonic, dominant, supertonic, submediant, mediant, and leading tone). With these tones, you can build three major chords on nF, nD, and nS, respectively; and three minor chords on nR, nL, and nM, respectively. The remaining tone, nT, is a so-called leading tone because it wants to resolve into nD. You can start anywhere on the Spiral of Seven Steps to derive the tones of any particular key - the tones always come in the same sequence.

Intervals can be assessed by the relative position between tones along the spiral.

Instead of talking about enharmonic equivalents of a tone, SaLaTa tones can come in different intonations. The intonation variants of any given tone are written next to each other along the radius of the spiral.





