

Title: MUSIC and Golden Ratio

Investigators: Ms. Shruti Prabhudesai, Ms. Divya Natu, Ms. Puja Kushte.

Abstract :

Name of project : Music and Golden Ratio.

Golden Ratio: In mathematics and the arts, two quantities are in the golden ratio, if the ratio of the sum of the quantities to the larger quantity is equal to the ratio of the larger quantity to the smaller one. The golden ratio is an irrational mathematical constant, approximately 1.61803398874989. Simply Golden Ratio means something good.

There are various applications of Golden Ratio like Music, Architecture, Egyptian pyramids, Book design, Nature, Finance, Painting, etc. Hence we have decided to study the relation between MUSIC and golden Ratio as application of golden Ratio.

We met people who are related to the field of Music and by interviewing them collected information about various types of songs. We finalized MARATHI SONGS as our domain.

Then as a second step we short listed songs according to their types. Then a survey was taken with the help of questionnaire of different category about the selected songs.

We have divided the songs in various parts with proper distinct criaterias and found the ratios in between all these parts of songs.

Also we have considered the words, letters and there ratios.

In our project we studied standard frequencies of the notations. All these things play an important role in composing songs.

So our project and the conclusions will be definitely useful for composing the songs. **Our research work may add a new parameter for composers while composing.**

This is an original research work as literature survey and interviews of stalwarts in the field, confirms this point.