# **Nvision**

(The intra-institute technical festival of IIT Hyderabad)

#### **Presents**

## **Celestial Inquisition**

Hello guys, we at Cepheid, the astronomy and astrophysics club of IITH, present before you, 'CELESTIAL INQUISITION' as part of Nvision. Each week, we pose challenges that include questions, puzzles, crosswords, illustrative questions etc. These weeklies shall continue through the semester, until "Nvision". Each one of them will reward you some points, depending upon its difficulty.

There will be 2 rounds. In case of tie in terms of quality of the answer, the first answer will be declared the winner. The student with most number of points wins the celestial inquisition.

You are free to refer books, use the internet or any other source of information for answering the questions. The solution to the given question must be submitted before the mentioned deadline (mostly, a week from the day of posting the question.)

### **CELESTIAL INQUISITION 1**

#### The first challenge of Celestial Inquisition-

Dr.Zego, an eccentric astrophysicist, was conducting an experiment to observe quasars in the distant cosmos. He was pondering over his results, but he didn't get what he had expected. He had been conducting this experiment for the past 10 years without any luck. The result of his experiment was an intermittent noise from the apparatus, persistent through the last few years.

Suddenly, his son comes up to him and asks, "Any luck daddy?" "No, my son, all my efforts have been in vain. I'm so tired of the experiments that I am quitting them right now". Seeing his father upset, his son takes out a photo to cheer his father. "Look daddy! This is the photo when you took me to the zoo for the first time on your shoulders!" Seeing it, Dr.Zego sighed." Your mother has a knack for clicking unclear pictures!"

Dr.Zego closed his eyes out of fatigue. The image of Albert Einstein floated through his mind. **WHAM!!**A new realisation dawned upon him! He started dancing in his lab and said, "To prove this I need to study \_\_\_\_\_\_".

- 1. What was the theory which came to Dr.Zego's mind? Explain it in a few lines. (10 Marks)
- 2. Fill in the blank. Give explanation about your choice. (10 Marks)

Please submit your answers by 11-Sept 2012- 12:00 pm.Late entries will not be entertained.

For any queries, contact:

Sharang Kulkarni,

Coordinator, Cepheid IIT Hyderabad me11b017@iith.ac.in

Nachiket Dongre, Sci-Tech Secretary, Student Gymkhana IIT Hyderabad me10b013@iith.ac.in