# $2^{nd}$ Inter-IIT Technical Meet 2013-14

#### Messier Marathon

#### Introduction

The competition draws its roots from the French Astronomer, *Charles Messier* of the 18th Century. He was an avid comet hunter, who was frustrated by objects which resembled but were not comets. So, he along with his assistant *Pierre Méchain* compiled a list of such objects, popularly known as *Messier Catalogue*. A *Messier Marathon* is an attempt, usually organized by amateur astronomers, to find as many Messier Objects as possible during one night. The Messier Catalogue consists of 110 relatively bright deep sky objects (galaxies, nebulae and star clusters).

## Challenge

To identify maximum number of items from the messier catalogue through the course of the night using the equipments provided.

## Rules and Regulations

- Each team will be provided with an alt-az mounted telescope (5" diameter), ensuring fair competition.
- There will be few surprise elements and bonus objects, that will declared at the time of the competition.
- The team size is strictly limited to 4 members and a maximum of 1 team per IIT is allowed to participate in the marathon.
- Star maps will be provided on the day of the practice day (2<sup>nd</sup> Jan 2014) and the same will be used for the competition. Use of any other printed material or electronic gadgets is strictly prohibited. However, hand-made notes and calculators will be allowed.
- The evaluation criteria of the competition is simple. More the number of objects the team identifies in the field of the eyepiece, more the number of points it scores. However, as mentioned earlier, bonus objects might carry more weightage.
- The decision of the organisers and judges would be final and binding.

## **Important Dates**

The event will span over three days,  $2^{nd}$  to  $4^{th}$  January 2014. The rough itinerary will be as follows:

| Date                         | Description  |
|------------------------------|--|
| $2^{nd} \text{ Jan } 2014$   | Everyone gathers at IIT Bombay. We leave for GMRT in the afternoon. We reach         |
|                              | GMRT by late evening. This night, which is a new moon night, will be for practice    |
|                              | and leisure sky observation.   |
| $3^{rd}  \mathrm{Jan}  2014$ | Announcing the marking scheme and time to plan out strategies for the competition    |
|                              | that will begin as soon as the sun sets.   |
| $4^{th}  \text{Jan } 2014$   | Roam around GMRT and visit the labs there. Chance to interact with people who        |
|                              | work there. We will leave post lunch and reach IIT Bombay by night.                  |
| $5^{th} \text{ Jan } 2014$   | Prize distribution at IIT Bombay along with prize distribution of the Inter IIT Tech |
|                              | Meet.  |

#### Venue

The competition will be held at the *Giant Metre wave Radio Telescope (GMRT)*, *Khodad* near Pune. IIT Bombay will arrange buses to take the teams from Bombay to GMRT. Food and accommodation will be provided at the venue.

\*\*\*\*\*