



## ASTRONOMY DISCOVERY TOUR TO INDIA – UNIQUE OPPORTUNITY

**21 April – 2 May 2011**

**Day 1** - Depart on International scheduled flight to Mumbai.

### **Day 2 – Mumbai**

Arrive at Mumbai International airport. Upon arrival and met and transferred to the hotel.

This evening you will be met by the Astronomers for the briefing session on the Observatories being visited during the tour.

Dinner and overnight at hotel.

### **Day 3 Mumbai – Pune**

Morning you will be transferred by coach to **Pune**.

Upon arrival met and transferred to the hotel. Afternoon visit the **IUCAA (University)** (30 mins) where you will meet the scientific officers or the Professors for the brief (1 ½ hours).

Dinner and overnight at hotel.

### **Day 4 Pune**

Morning visit to the **GMRT & NCRA Observatory** (04 hours) - A private observatory which was commenced by Capt. W.S. Jacob at Poona (modern Pune). It was in operation from 1842 to Jacob's death in 1862. The main work done by the founder was the observation of 244 double stars, of which he published a catalogue. He is also famous for his calculation of the orbits of a few binaries, e.g., Centauri, and in particular for the triplicity of Scorpii in 1847. You will have a 4 hour session with Research Fellow / Professor.

Dinner and overnight at hotel.

### **Day 5 Pune – Ahmedabad – Mount Abu**

Morning transfer by coach to Ahmadabad where you will be met and drive to **Mount Abu** (240 kms).

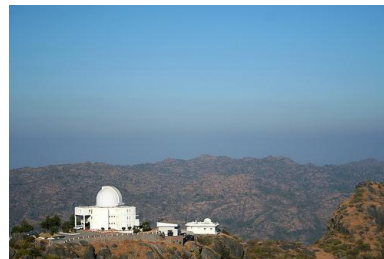
Upon arrival, check-in at hotel.

**Mount Abu** - A serene retreat set amidst lush forested hills, Mount Abu is the only hill station in Rajasthan. Situated at the southern tip of the Aravali range, this pleasant hill retreat in Rajasthan owes its cool climate to its rich flora covering the entire hillside that includes coniferous trees and flowering shrubs.

Dinner and overnight at hotel.

### **Day 6 Mount Abu**

Morning visit the Observatory Infrared Telescope Observatory at Gurushikhar, Mt. Abu (PRL) (15 kms). The Infrared Telescope at Mount Abu is the first major facility in India specifically for ground based infrared observations of celestial objects. The located near the hill resort of Mount Abu in the state of Rajasthan. The is at an altitude of 1680 metres adjacent to Gurushikhar - the highest whole of central India. Further the low amount of precipitable water mm during winter) at Gurushikhar makes it a good site for the infrared observations. The site has been found to be good (about 150 cloud free year) for astronomical observations. The specifications for surface finish telescope mirrors has been one-tenth of 589 nm line of sodium so that telescope can be effectively used for imaging studies at both optical and infrared wavelengths. The optical system of the telescope consists of 1.2 m paraboloid primary mirror that can be used in conventional Cassegrain and Coude configurations using hyperboloid secondary mirrors. The standard Cassegrain configuration utilises a nonvibrating secondary mirror with an effective focal ratio of f/13.



designed telescope is observatory peak in the vapour (1-2 telescope nights per of the the

For infrared observations, to detect faint objects in the presence of sky brightness gradients a provision for nodding the primary mirror has been made. In addition there is provision for a vibrating secondary mirror with an effective focal ratio of

f/45 for modulation of star signal. The second optical configuration consists of f/45 focal ratio Coude system for very heavy focal plane instruments like high resolution spectrographs.

Later in the evening visit the stunning array of exquisite **Dilwara Jain temples**, beautifully carved temples built between 11<sup>th</sup> and 13<sup>th</sup> century A.D. are sheer elegance in marble, dedicated to the Jain Tirthankaras. The Vimal Vasahi temple is the oldest of these dedicated to the first Tirthankara. Built in 1031 A.D. (by Vimal Shah-a merchant and representative of then Gujarat ruler), it is a superb example of temple architecture. Another is Lun Vasahi temple and Adhar Devi temple with its many stairs is a tourist attraction.

Dinner and overnight at hotel

### Day 7 Mount Abu – Udaipur

Morning drive to **Udaipur** (292 kms) en-route visiting **Ranakpur Temples** – the most magnificent 15<sup>th</sup> century Jain temples situated in the deep secluded valley of the Aravalli Hills. Though over 500 years old, the temples here are superbly preserved in a near-perfect condition. In the centre is the main “Chaumukha temple” dedicated to Adinath. The most distinctive features are the 29 halls supported by 1444 pillars, of which no two are exactly alike. Every conceivable surface is carved and every corner and angle is engraved with Jain images.

Continue to Udaipur and check-in at hotel.

Later **City tour of Udaipur**, one of India's most romantic cities and famed for its lovely palaces and lakes. Begin by visiting the **City Palace** and wandering through its beautiful rooms and apartments, then continue on to the Garden of Maidens "**Sahelionki-bari**".

Dinner and overnight at hotel.

### Day 8 Udaipur

The **Udaipur Solar Observatory** – situated on an island in the middle of the **Fatehsagar** and the main office building is located at its NW-shore near **Bari Rani Road Junction**. The sky conditions at **Udaipur** are quite favourable for observations. The large water body surrounding the telescopes decreases the heating of the surface layers. This Decreases the turbulence in the air mass thereby improves the image quality and seeing. The main objective of the high spatial and temporal resolution observations of solar photospheric and chromospheric activity is to understand the various dynamic phenomena on the surface of the Sun. You will spend about 1 ½ hours at the Observatory. Fly to **Jaipur** Upon arrival transfer and check into the hotel.

Afternoon free for own activities.

Overnight at hotel.



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### Day 9 Jaipur

Morning tour of the impressive **Amber Fort**, situated on a ridge just outside Jaipur City. The Fort, completed in the early 18<sup>th</sup> century, took over 100 years to build and now, although deserted, offers a fascinating insight into the lifestyle of the Moghul ruling families.

Afternoon **city tour of Jaipur** – visit the imposing **City Palace**, still home Maharaja although several of the rooms are now open to the public. antiques and artifacts belonging to the ruling family are housed here, collection of weaponry. You will also visit the **Hawa Mahal** "Palace of the the open-air **Jantar Mantar Observatory** to see the vast astronomical Tourist sightseeing meetings with the officials from the Observatory.

Dinner and overnight at hotel



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### Day 10 Jaipur – Agra

Morning transfer by coach to **Agra** en-route visit **Fatehpur Sikri**.

**Fatehpur Sikri** the deserted, red sandstone city that was built by Emperor Akbar as his capital and palace in the 16<sup>th</sup> century. Also visit the **Bulund Darwaza** the largest gateway in the world.

Continue drive to Agra and upon arrival – check into the hotel.

Later visit to **Taj Mahal** - This most famous Moghul monument constructed by Emperor Shah Jahan in memory of his wife Mahal "the lady of the Taj". It has been described as the most monument ever built for love, for the emperor was heartbroken died after 17 years of marriage, during the birth of her 14<sup>th</sup> child. **closed on Friday**). Dinner and overnight at hotel.



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### Day 11 Agra – Delhi

Morning drive to Delhi (203 kms). Upon arrival, check into your

hotel.

Also visit the **Jantar Mantar** (Observatory) and meet with Space officials.

A unique structure raised in 1724, now lies in the heart of Delhi's commercial Connaught place. This is the **Jantar Mantar**, one of several astronomical observatories raised by **Maharaja Jai Singh II** of Jaipur. The various structures within the **Jantar Mantar** are, in fact, instruments that were used track of celestial bodies. Yet, Jantar Mantar is not only a timekeeper of bodies, it also tells a lot about the technological achievements under the kings and their attempt to resolve the mysteries regarding astronomy. Quiet farewell dinner at the Crowne Plaza Hotel Restaurant with the representatives from Space. Overnight at hotel.



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**Day 12 Delhi** - Morning transfer to the International airport for flight back home.

**Cost : £2850 per person**

#### **Cost Includes**

- Accommodation on twin/double sharing basis for 10 nights in good quality hotels.
- International return economy class flights between the UK and India on scheduled airline services.
- UK departure taxes.
- Visa (we will obtain on your behalf).
- Based on room with breakfast and dinner in the hotels.
- Transfers and sightseeing by air conditioned vehicle as per the itinerary.
- Entrances at monuments at all cities as per the itinerary.
- Services of an English speaking escort cum guide for the tour as per the itinerary.
- Services of a Tour Manager and a SPACE representative.
- Gratuities for the drivers, guides, porters.

*The price of our air holiday package includes the amount of £2.50 per person as part of the ATOL Protection Contribution (APC) we pay to the CAA. This charge is included in our advertised prices.*

#### **Cost Excludes**

- Insurance – it is a requirement that you have insurance for your holiday.
- Any personal expenses such as laundry bills, telephone bills, beverages.
- The cost is based on current fuel prices, taxes and other statutory levies. In case of any increase in the same or any other inputs, we reserve the right to amend the price accordingly.
- The cost is based on current exchange rates. In case of more than 4% difference in exchange rates (at the time of operation of the tour) we reserve the right to adjust prices accordingly.
- Single Room Supplement (£585.00)

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