



Armagh Planetarium

Armagh Planetarium opened in 1968 as the space race to the Moon reached its climax. It was designed to explain the mysteries of the Universe and to present the public face of astronomy. The Planetarium was built using money provided by public subscription, raised by the dynamic Observatory Director, Dr Eric Lindsay. Dr Lindsay also raised important supplementary funding from the governments north and south of the border, no mean achievement at that time. The Planetarium quickly became a popular venue for schools and the general public, and inspired in many visitors an abiding interest in space exploration. Armagh Observatory opened in 1790 and is recognised as a world-class research organisation. The unique juxtaposition of the Observatory's scientific research, and the Planetarium's presentation of the public face of astronomy on the same historic Armagh site, offers opportunities to exploit the public appetite for information about space exploration.

The Planetarium's primary function is science education. The Planetarium's mission is to entertain, educate and inform our visitors of all age groups. To perform this function we must become a prime source of information for the public in person, by phone and on the Internet.

What do we do?

The Star Theatre is the focus of the Planetarium experience. Its starfield projectors are true time machines, allowing the operators to take the Planetarium audience backwards and forwards in time, by programming the computer to specific dates in the past or in the future. The stars and planets shown are those that would have been visible at that time and in that place, as the observers can be sited anywhere on Earth. Computer graphics allow stunning reconstructions of the remote exploration of the Solar System's planets to be shown almost as soon as the events occur. New software now allows observers to view from positions in space, looking back at the Earth or the Solar System. The very latest equipment allows virtual tours to be taken in real time through the Universe. Science fiction becomes science fact.

In terms of the declared objectives of the DCAL and the Executive the Planetarium's operations already address almost all of the issues mentioned in their plans. We involve people from all sections of the community, we run special interest events for minority language and hobby interests, we are involved in lifelong learning, we engage with community groups, and disabled and special educational needs organisations. We will attend community groups in their home bases, just as we do for schools, and we service schools and visitors from both sides of the border. We are a family centre and satisfy the curiosity of many would be astronauts. The Planetarium has a coffee shop, and provides a venue for community events and commercial launches.

The Planetarium fulfils an important role in the local visitor attraction community, and is an active member of the Armagh Marketing Initiative, where the two local council attractions, the Navan Centre and the Planetarium collaborate in presenting a tourist friendly image to the potential visitor. We market the city as a group, and host travel and tourist writers every year. Destination Marketing is undoubtedly the way forward for Armagh, and the establishment of a verified and lasting peace an absolute pre-requisite for realising its potential.

Database

The Planetarium is a repository of information for the general public. Many telephone queries are answered on a daily basis, especially when something new, like the International Space Station is seen in the night sky. We answer questions about UFO's and shooting stars, and help identify many so-called meteorites. Staff write articles for local newspapers and provide informed expert opinion to local TV and radio stations.

Irish Language

The Irish language school community use the Planetarium as an Irish medium site for a week during March each year. We have run this as an annual event for the past three years in collaboration with Gael-Linn and the Ultach Trust. Similar events have been discussed with the Belfast Education and Library Board to exploit the Planetarium as a learning centre for French: we can obviously do the same for the other minority and ethnic languages of Ireland.

New TSN

The current drive from the NI Assembly is to be more inclusive, and to provide access to the whole population instead of the privileged few. This emphasis will allow the Planetarium to perform an important social function - Targeting Social Need (the new TSN programme). Knowing the statistics of social deprivation for schools, it is possible to skew the efforts of Outreach staff, to deliver presentations to those schools that we know have high TSN indices of social deprivation. This work is already in hand, but with a modicum of sponsorship it could be greatly expanded, as the ideal would be to offer these services free, provided by a sponsor organisation.

Outreach

The advent of easily created digital imagery, and the reduction in size of the projectors and laptop computers needed to deliver these images to an audience, now means that the planetarium staff can take the material to anywhere on the island, and all that is needed is a blank wall or screen, plus an electric power point. Thus the Outreach facility has become very important as a means of taking the message to the people. The Outreach Programme has a broad menu of choice and includes other topics as well as the usual Solar System and planetary science presentations. These include topics such as: Viking Navigation; Stone Age cultures and the first astronomical observatories; dinosaur extinction; meteorites and comets; and the statistics of the planet being struck by a Near earth Object.

Exhibits & Displays

The Planetarium is committed to giving visitors interactive experiences by actively encouraging them to touch and play with exhibits and displays. The idea is to explain science by stealth, and to make it an exploration of their own curiosity and imagination. It must be a happy, pleasant experience. We also try to provide curriculum-relevant elements that will support teachers in their classroom work. Displays are designed to appeal to as wide an age range as possible, by promoting a mixture of art events involving parents and children, construction opportunities with water rockets and large LEGO bricks, use of number and 3-D work, and touch tables and sand pits.

The animated presentations prepared by staff for visitors are specifically tailored to the different audiences who visit the Planetarium, ranging from primary schools to extra-mural adult courses. The Planetarium is a family friendly centre, where the whole family can find something of interest, and afterwards enjoy a visit to the Astropark or the café. Special events are organised throughout the year, and these normally include plenty of child friendly activities with face painting, and the making of water rockets and space art. We take short 10-second films of the children's water rocket take offs and give them to parents as a memento of the visit.

Vision for the Future

The future vision for the Planetarium site involves the modernisation and upgrade of the Planetarium building. This includes the construction of a much better fire escape system that will allow wheelchair-bound visitors to escape quickly during an emergency. It also includes provision for improved access to the 16" public telescope, which is housed in a research building that was not designed for easy public access: entry is difficult even for the able-bodied.

To commemorate the Challenger space shuttle disaster a US-based organisation has created the concept of Challenger Centres where school parties can arrive and be taken through the adventure of a real time space mission. The visitors are presented with simulated problems that need solving, using teamwork and collaboration, and in so doing they learn a lot of science and mathematics along the way. The programme is adaptable and is run by two flight controllers. It is also suitable for business training sessions. It is run on computers, and can be updated by new software releases, that also provide new adventures. It is also a new revenue stream for the operators, and the Planetarium needs to maximise its income to continue providing a good public service.

Over 40 are in operation in the United States and one has been built in at Leicester. To attract people to the Planetarium site for a day visit, we need to have more than the upgraded Star Theatre and new displays. We must consider enhancing the Planetarium site: one possibility is to build a Challenger Centre. This projected enlargement would allow us to establish the Armagh Planetarium and Space Science Centre.

The Armagh Planetarium and Space Science Centre (APSSC)

The APSSC project is one of redevelopment, to exploit and capitalise on past success, and to rejuvenate what has become a tired and worn structure. The Planetarium is recognised by Armagh City and District Council as a linchpin in the city, attracting school parties and tourists from home and abroad. We propose to rejuvenate a proven operation, a process that will create new jobs in the Planetarium, and secure those that already exist. Strategically placed at the heart of Ireland, more than 2/3 of the island's population live within a two-hour drive from the Planetarium. This project could draw financial support from the International Fund for Ireland, and the EU.