





## Armagh Observatory & Planetarium selects Cobra Simulation and REA Sound for immersive video wall.

### Client profile

The **Age of Enlightenment** in the 18th century saw a steady increase in the study of science. Astronomy at that time found itself at the forefront both with the increased interest in experimentation and observations, and with the increase in maritime trading, for which the science of navigation by celestial objects was crucial.

During this period **Richard Robinson**, Lord Archbishop of Armagh, a rich and influential man used his strengths to promote and build several charitable and educational institutions, particularly in Armagh.

**Armagh Observatory** was one such project, constructed in 1790 on College Hill. It is the oldest scientific institution in Northern Ireland. Its main purpose was as an educational and research centre. Robinsons ultimate vision was to build a new university in the city.

The Observatory site has gone through many changes since its inception and in 1968 was expanded to include the Planetarium. The Planetarium has a large seated observation theatre with a state-of-the art digital projector system which provides visitors an immersive experience through the universe under the full dome.

<https://armagh.space/>



## The Cobra challenge

Working with our preferred partners, **(Rea Sound NI) Ltd**, The Cobra Simulation challenge was to provide **Armagh Observatory & Planetarium** an immersive visual solution that extends their data set research capability, supports the design, monitoring, real time

optimisation of the immersive content being shown on the large auditorium immersive dome display and look at new ways to engage the public in the planetarium. It would also need to be housed in an office with limited access. This was due to door and hall size

## The Customer Review

“Reviewing data sets along with optimising the projected image being shown in our dome theatre has become so much simpler to manage. Having the desktop sized immersive visual display in the office instantly provides that point of interaction which we were previously missing. Armagh’s astronomers have been able to engage directly with visitors taking them on personalised tours of the cosmos and we no longer need to wait on the attraction closing to review content. The support and service levels received from Cobra Simulation throughout have been excellent.”

Ciaran Magee  
 ICT Manager  
 Armagh Observatory & Planetarium



## Why Cobra?

We asked Ciaran what it was about Cobra that appealed?

“We were looking for a solution which would allow us to work with immersive content in an office environment. Our director, Professor Michael Burton shared that he worked with Professor Tom Jarret on a **Cobra150** product in 2017 for the **Universtiy Of Capetown** which is still in use today. Michael recommended **Cobra Simulation**, suggesting it would be the right choice for this project, noting how well the **Cobra150** has performed at our sister observatory in South Africa over the past few years”

## Benefits

When asked about the benefits of our **Cobra Curved Display**, Ciaran split his response into these key areas:

- “Its primary use centres around our research with data sets that later may be used on our large Planetarium dome.”
- “Our visitors are much more engaged as we can give personalised tours of our cosmos.”
- “We can develop content regardless of whether the attractions are open or closed.”
- “Editing on the videowall and being able to review it real time within an immersive visual dome helps us understand what our vistiors will experience before we deploy the content.”
- “Ultimately we are more efficient, more engaged with the public and will save time and money.”

## The Cobra solution in detail

The **Cobra150 Venom 8K Pro+** system features the unique **OmniFocus™** folded fish eye optic system with an integrated 8K projector, the dome display delivers 150 degree by 66 degree field of view, has a custom support stand and uses **Cobra OmniWarp** our latest state of the art desktop warping software.



Professor Michael Burton (pictured above taking delivery of the Cobra150 Venom in Armagh)