## HEAVENLY VIEWS ARE VERY OLD SCHOOL



ON my first and only previous visit to the Old School House above Allenheads, I had been accompanied by a group of teenage children I was bringing for a weekend of adventure on the Allendale hills.

ANTHONY TOOLE sees how art and astronomy have been successfully combined with the opening of a new observatory in Allenheads.

But that was a long time ago. The Victorian building, constructed in 1848, was then in use as an outdoor pursuits



Allenheads Contemporary Arts: the Old School House.

building's renovations. I had left the car in the village and walked up the short though steep hill to the school by torchlight. There I joined a group in what was still essentially a classroom to listen to a talk by Dr Peter Edwards of Durham University about recent discoveries in astronomy. It was one of a series of such evenings that were being held throughout the early months of the year.

Dr Edwards spoke eloquently about galaxies, dark matter, dark energy and the Large Hadron Collider, illustrating his talk with stunning images from the Hubble space telescope, in a manner that everyone including my 17 year-old

centre. Since 1994 it has acted as a focus for Allenheads Contemporary Arts, the brainchild of artists Alan Smith and Helen Ratcliffe, providing a base and sometimes residency for both local and international artists to pursue their work, inspired by the wonderful North Pennines scenery. In the village below, the former post office has been transformed into a studio and exhibition space.

The Old School House is also used to accommodate visitors to the region and passersby on the Coast-to-Coast Cycle Route. The space I remembered as being taken up by racks of walking boots, waterproof clothing and rockclimbing gear is now occupied by twin-bed and four-bunk rooms which sleep up to 12 people, kitchen and shower facilities and a comfortable sitting room.

However, I was not here this time to admire the



View of Allenheads from the Old School House.



The observatory and warm room.

grandson found extremely accessible. But why were these meetings being held in such an out-of-the-way place as Allenheads?



The Allen Valleys Landscape Partnership Scheme was set up in 2008 with a view to conserving the environment for wildlife and preserving the rich industrial heritage of the valleys (see The Northumbrian Issue 148, October 2015).

outhouse behind the old school. The £20 000 budget was small, so the use of recycled materials was encouraged.

The observatory was to house a mobile 10inch Dobsonian telescope, a small, 4-inch (114 mm) reflector and a 10-inch (254 mm) Newtonian reflector telescope on a fixed mount, its movement to be controlled electronically. The large, fixed telescope was generously donated by astronomer and astrophotographer Graham Relph, who had his own observatory in Rookhope, above Weardale.

The indoor space would accommodate five to eight people, was to be dry and windproof but well ventilated, and have

good insulation as it would not be heated. The electrically-operated roof would slide off to allow observations of the night sky. Deadline for entries to the competition was November 5, 2015, with the winners announced

at the end of that

month. The £500 prize



The 4-inch reflector telescope.

was awarded to Becky Wise, Katie Fisher and Noor Jan-Mohamed. Building work on the observatory, undertaken by Ladycraft Ltd of Durham, was completed by the spring of 2017.

In June I returned to Allenheads. The occasion this time was the first of a short series of illustrated talks for school science teachers by Andy Gray, Head of Science at Whitley

The 10-inch Newtonian reflector telescope.

A Heritage Lottery Fund grant of £1.7 million was awarded in 2014 to run for four years. As part of this scheme, discussions began in 2015 between the directors of Allenheads Contemporary Arts and the North Pennines Area of Outstanding Natural Beauty to build an astronomical observatory in the valleys to make full use of the area's freedom from light pollution. The AONB has designated 16 Dark Skies Discovery Sites of which five are in Northumberland, one of them at Allenheads. In October of that year a competition was launched for full-time and part-time architecture students at Newcastle University, overseen by Tim Bailey of Xsite Architecture, to design the observatory to be built on the site of a derelict



Inside the warm room.



Professor Chris Welch opens the observatory.

Bay High School, showing some of the aids and websites available for use in the teaching of astronomy to students of all ages.

Following the talk, Fiona Knox of the AONB conducted



us on a short visit to the observatory. Though it was still daylight and overcast, with a thin drizzle, she explained the use of the telescopes while local artist and keen

Negociation 59: The Horizon of Matter.

astronomer Gary Lintern demonstrated the operation of the sliding roof.

We then moved into the adjacent warm room, the walls of which were decorated by large photographs of the planets. This room, which can seat around a dozen people in comfort, has a large screen that can be linked to a laptop

computer. In future it is hoped to link this and the AONB website to a webcam fitted to the large telescope.

Astronomy groups as well as local schools are encouraged to make use of the facilities at the observatory. If enthusiasts wish to bring their own telescopes along, these can be set up on the old school yard, where a screen can be raised to shield them from the lights of Allenheads village.

In October I again returned to the observatory for its official opening by Professor Chris Welch of the International Space University in Strasbourg, a winner of the Sir Arthur Clarke Award for space education. The event was timed to coincide with World Space Week, an annual celebration instituted by a United Nations declaration in 1999.

The opening was applauded by more than 50 guests, who then accompanied Professor Welch into the classroom where he presented a talk answering the question 'Space: What is it Good For?'. He showed some beautiful, even profound images from the Hubble space telescope and the various planetary probes. He discussed the benefits in communications technology, international co-operation and economics, explaining how relatively cheap space exploration is when weighed against these, and our growing dependence upon them. Artistic inspiration from our exploration of space has

also been emphasised with the setting up of the 'Beyond' project by Alan Smith and Helen Ratcliffe of Allenheads Contemporary Arts. The first fruit of this was a sound and visual installation, 'Negociation 59: The Horizon of Matter' commissioned

from young



The artist Caroline Le Méhauté.

French artist Caroline Le Méhauté, which was unveiled by the artist on the day the observatory was opened. A creation of wood, paint and optical fibre, this was displayed in a blacked-out room in the village exhibition centre. A somewhat disorientating artwork, it immersed one in a vision of the immensity, emptiness and coldness yet incredible beauty of the universe.

As a scientist with an abiding passion for the arts, I can only applaud this successful bringing together of the two disciplines, and hope that it continues to thrive for many years to come.



Dr Peter Edwards bathed in cosmic microwave background radiation, the remnants of the Big Bang.