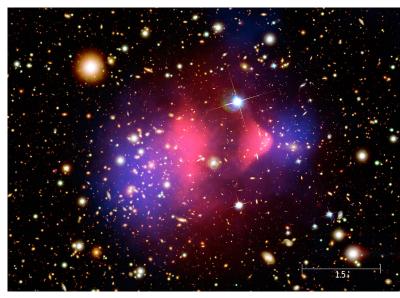
## **Dark Matter Masks**

Did you know that we don't know what most of the Universe is made of? Scientists think that there is something called dark matter – we can see its effects, but we've never been able to catch it!

Many people think dark matter is made up of tiny particles call WIMPs (Weakly Interacting Massive Particles). If it is, we know WIMPs are heavy, they pass straight through almost everything and they aren't electrically charged or magnetic!



NASA/CXC/M. Weiss - Chandra X-Ray Observatory: 1E 0657-56

Boulby is a very special place to search for dark matter – and to do lots of other science too! We're helping to explore other planets by testing things in our Mars Yard, looking at energy storage and helping develop early warning systems for tsunamis.

To search out this mysterious dark matter, scientists, technicians and engineers go deep underground, to places like the Boulby Underground Laboratory (1.1 km beneath the surface) to try and find it!







Find out more on our website: https://www.boulby.stfc.ac.uk/Pages/home.aspx

## **Dark Matter Masks**

To try to find dark matter, scientists, technicians and engineers need to use their imaginations to create the best experiments they can!

Can you use your imagination to make a dark matter mask for yourself? Remember, dark matter is heavy, mysterious and can pass through everything – how could you show that in a mask?



First, take a paper plate and cut some eye holes in it – you might need to get a grown-up to help you!

Next, punch two holes on either side of the paper plate – and thread some ribbon through each hole.
This is so you can tie your mask on!





Now decorate your mask! How will you make the mask look mysterious? You can use whatever you like to make it look as exciting as possible!