

Deep Science at Boulby Underground Laboratory: Subterranean studies at the UK's deep underground science facility.

For more than three decades UK astrophysicists have been operating experiments to search for Dark Matter 1100m below ground in a purpose-built 'low-background' facilities at Boulby mine in the North East of England. This facility - the Boulby Underground Laboratory - is one of just a few places in the world suited to hosting these and other science projects requiring a 'quiet environment', free of interference from natural background radiation. The race to find Dark Matter continues and Boulby currently supports the DRIFT/CYGNUS directional dark matter detector programme and operates a growing suite of high sensitivity Germanium detectors for material screening for future Dark Matter detectors (inc. LZ) and other rare-event studies. In the meantime the range of science projects looking for the special properties of deep underground facilities is growing and new projects operating at Boulby range from astro & particle physics to studies of geology/geophysics, climate, the environment, life extreme environments on Earth and beyond. This talk will give an overview of the Boulby Underground Laboratory, the science currently supported and plans for science at Boulby in the future.

Author: Mrs MEEHAN, Emma (Boulby Underground Laboratory)

Presenter: Mrs MEEHAN, Emma (Boulby Underground Laboratory)