

- ○ Local Centre Meetings ^[1]
- Scottish Local Centre ^[2]

Date: Tuesday 14 January
2020

Time: 17:30 - 19:00

Location:

University of Edinburgh
School of GeoSciences
The University of Edinburgh,
Grant Institute
The Kings Buildings, West
Mains Road
Edinburgh
EH9 3JW
UK

Email:

scotland@rmets.org ^[3]

SPEAKER | Dr Bill
Macpherson, Heriot-Watt
University

Bill MacPherson is an Associate Professor in Physics at Heriot Watt University. His research interests are centred around the application of optical and fibre-optic techniques for measurement and instrumentation. This includes high bandwidth temperature and pressure sensors for aerodynamic and explosion monitoring, vibration and acceleration measurement, and studies into potential

sensing applications of novel microstructured fibres.

He supports the department's automatic weather station on the summit of Cairngorm.

Bill has run many school workshops on a variety of aspects of physics. He co-ordinates the Scottish 'Physics in the field' initiative run by the Institute of Physics, with activities at highland games, country fairs, ski centres and science festivals.

ABSTRACT | Since 1977 an automatic weather station has been situated on the summit of Cairngorm (1245m) recording wind speed, direction and temperature. This location exposes the station to the extremes of the UK's climates with sub-zero temperatures possible at any time of the year. Winter wind speeds frequently exceed 100 mph and the station holds the record for the strongest gust in the UK, 176 mph observed on 3rd January 1993.

The talk looked at the history of high-level meteorological stations that led to the development of the automatic weather station in the 1970s and considered some of the design criteria and constraints at that time that led to the final design. The presentation featured archive material that illustrates some of the challenges with maintaining meteorological equipment in such environments and also considered some of the

pioneering approaches taken
to disseminate the weather
data from the pre-internet era
to the present day.

Source URL:<https://accsys.rmets.org/events/cairngorm-automatic-weather-station-40-years-top#comment-0>

Links

[1] <https://accsys.rmets.org/about-us/local-centres> [2] <https://accsys.rmets.org/about-us/local-centres/scottish-local-centre> [3] <mailto:scotland@rmets.org>