Cheerio, mate – it was an honour to know you.

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OBITUARIES

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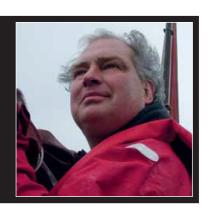
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Andy Breen 1964–2011

Fellow of the RAS, solar physicist, sailor and enthusiast.



ndy Breen was born in Sunderland in 1964. Many of us first met him as a young PhD student, working with the late Phil Williams at Aberystwyth in the late 1980s. The enthusiasm and philosphy of his supervisor resonated deeply with him and they quickly formed a highly effective team. They carried out the kind of research that had been expected from the European Incoherent Scatter (EISCAT) radars in northern Scandinavia, studying the detailed physics and chemistry of the upper atmosphere. After working at Southampton University and the Max-Planck Institut für Aeronomie at Lindau, he returned to Aberystwyth in 1998 as an Advanced Research Fellow, joining the academic staff in 2001.

This reunited him with Phil Williams, and together they forged a novel, unique and unexpected research programme for EISCAT. Specifically, they exploited the long baselines of the receiver sites to monitor the scintillation of radio stars caused by irregularities in interplanetary space, and devised a correlation technique to study the early acceleration of the supersonic solar-wind outflow. They realized that the EIS-CAT frequencies allowed them to make measurements closer to the Sun than anybody else had managed. This was real, exciting, worldleading science. Phil may have supplied the initial idea, but it was Andy who made it actually work; so much so, that by the time Phil moved on to political life in Cardiff, Andy had become a world leader in his field, working with, and respected by, solar physicists from all around the world. He was a co-investigator on the Heliospheric Imager instrument on the NASA STE-REO mission and on the Solar and Heliospheric Key Science Project for LOFAR. During 2007 and 2008 he was one of the leading organizers for the International Heliophysical Year.

But these successes did not come easily. Early in his career, he fell victim to myasthenia gravis, with his immune system increasingly attacking his own nervous system. This condition affects just 1 in approximately 20 000 people in the UK and is very rare indeed in young men. The need to suppress his immunity led to throat cancer,

from which he also recovered, but thereafter spoke in a husky, breathless voice. A lesser individual would have crumbled – but you couldn't get Andy Breen down that easily. The disease, and other consequent medical complications such as pneumonia, very nearly killed him a number of times and it is hard to convey the scale of the struggle he faced. Often he would support his forehead in a specially made frame so he could keep working when he was too weak to hold his own head up. That he achieved as much as he did is testament to his extraordinary willpower and bravery as well as his talent.

He survived to become the most amiable of eccentrics. He had eclectic tastes and championed the obscure in music, literature and the arts, as well as in science - because he understood that good things have small, often unpromising, origins. It was the same in his attitudes towards people and politics - he championed the young, the struggling and the oppressed, while never needing to despise the powerful, the rich or the successful - unless, that is, they misused their power, their wealth or their influence. Then they would incur his wrath, which could be formidable and very witty. He was exceptionally kind to those who deserved it and very funny, both qualities inspiring loyalty and affection in students and colleagues. He got real joy and relaxation from sailing when he was able, and it was a huge pleasure to follow his travels on the internet. But the thing he loved more than anything else was being in the company of his friends, laughing and holding forth on one of his passions - not because he thought he was interesting (which he always was) but because he thought the subject was interesting (which it almost always was).

His wit, spirit, humanity, courage and decency touched many more people than he realized and his early death, from complications following heart surgery at the age of 47, means he will be hugely missed by his friends, his colleagues at Aberystwyth and all in the several scientific communities that were lucky enough to count him as one of their own.

Mike Lockwood

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theguardian

Andrew Breen obituary

Mike Lockwood The Guardian, Monday 30 January 2012



Andrew Breen was an amiable eccentric with eclectic tastes

Andrew Breen, who has died aged 47 after heart surgery, was a world-leading <u>space</u> scientist. I first met Andy in the late 1980s when he was a PhD student at <u>Aberystwyth University</u>. Born and brought up in Sunderland, he had been educated at <u>Monkwearmouth school</u> there. At Aberystwyth, he quickly formed an effective team with his PhD supervisor, <u>Professor Phil Williams</u>, initially studying the <u>physics</u> of the upper atmosphere during aurorae, using data from the Eiscat radars in northern Scandinavia.

But then, they began to forge some novel and unique research. They used the "twinkling" of radio stars to study the acceleration of the solar wind outflow from the sun. They realised that Eiscat allowed them to make measurements closer to the sun than anybody else.

This was exciting and cutting-edge science. Phil may have supplied the initial idea but it was Andy who worked through the details and made it work. By the time Phil moved on in 1999 to become a member of parliament in Cardiff, Andy had become a world leader in his field.

This success did not come easily. Early in his career, Andy's immune system began attacking his own nervous system. Myasthenia gravis is exceptionally rare in young men and it, and a host of complications, very nearly killed him. It is hard to convey the scale of his struggle. Often he would support his head in a specially made frame so he could keep working even though he was too weak to hold up his own head. That he achieved so much is testament to his extraordinary willpower and bravery, as well as his talent.

He survived to become the most amiable of eccentrics. He had eclectic tastes, championing the unknown in music, literature and art, as well as science – because he understood that good things have small origins. It was the same with people and politics – he fought for the young, the struggling and the oppressed, whilst never needing to despise the powerful, the rich or the successful, unless they misused their power, their wealth or their influence: then they would incur his formidable and witty wrath.

He was kind to those who deserved or needed it and especially to his students. His wit, spirit, humanity, courage and decency will be greatly missed by his friends and colleagues. He is survived by his mother, Joan.