

## **RAYMOND JAMES COHEN -- fifty-eight years of age**

It is a privilege and an honour to talk about my friend Jim Cohen

To us in the scientific community Jim was a colleague, a teacher, a collaborator, and a friend. More importantly, Jim was a husband, he was a father and he was a parishioner of St Gregory's here at Bollington.

The shock of Jim's passing is still reverberating in the astronomical and spectrum management communities. Emails are still circumnavigating our planet with reactions and expressions of grief and sorrow.

Let me first say something about Jim at **Jodrell Bank and as part of the international astronomy community**. His research career started with his first paper in 1974 co-authored with Rod Davies and Andrew Wilson. Since then there have been some 190 papers in a variety of scientific and popular journals and publications.

Much of the research was done with students and in the course of his career he made significant contributions to the study of neutral hydrogen in high-velocity clouds, studies of molecular emissions in our Galaxy, and studies of masers in our Galaxy and other galaxies.

Most recently he has been working on methanol masers. For this research he initiated and was granted the funding to build a new receiver and start a very ambitious methanol survey of the southern skies using the Parkes telescope in Australia with a large consortium of researchers from Britain and Australia. It is sad that Jim will not be able to continue his participation in this project.

In March there will be a large maser conference in Australia and the organizing committee of the conference from across the world has already decided to dedicate the conference proceedings to Jim, in recognition of his major contributions in this area of astronomical research.

Jim was a much appreciated colleague at Jodrell Bank. He was a walking encyclopedia on star-formation and many other astronomical subjects. One colleague mentioned to me this week that Jim in his quiet and peaceful manner played a much larger role in the success of Jodrell than most people realise. He was not only a man full of ideas but also someone who actually acted on them. Jim will leave a tremendous void at Jodrell in many ways.

Another area where Jim will be remembered is in the international **spectrum management community**, where he fought to reduce man-made radio interference for sensitive radio telescopes like those at Jodrell Bank and other large instruments elsewhere in the world. He served as the main liaison with the government's Radiocommunications Agency on national issues. He actively participated in the

decision-making processes not only in the United Kingdom, but also in Europe, and at the International Telecommunications Union in Geneva, which is the UN decision making body on spectrum issues.

Spectrum management consists of numerous, lengthy (sometimes even four weeks long), and often tense and controversial committee meetings attended by government representatives, commercial users, and the scientific radio spectrum users. .

With his open attitude, his sense of humour, and his quiet and stable demeanour that we all recognize, Jim was a very effective participant whose substantial input over a long period of time made him a leader in this group. Special memories for me are the times of working together with him and John Ponsonby to negotiate the agreement between the radio astronomers and the Russian military generals about the GLONASS satellite system in 1993. Jim's work was of great import in solving the problems with GLONASS.

The colleagues from IUCAF and CRAF will miss his solid and consistent stance and his friendship. By the way, the pub that serves as a meeting point for astronomers when in Geneva is called the Lord Jim. Now, that name and place have acquired a more personal significance for us.

### **Jim as a Teacher & Leader**

He has been the supervisor of 20 MSc students and 11 PhD students some of which are present here.

As a person and as a teacher Jim was very gentle and approachable. One could hardly fail to notice how popular he was among students when they choose their supervisors. One time he held a barbeque to mark the fact of his having no less than six MSc and PhD students simultaneously.

Jim was an effective and patient teacher who played a prominent role in every aspect of every project in which he was involved and made it a learning experience. He had the gift of teaching and ably communicated his understanding to less experienced members of the group. This was true not only at the telescope but also in the classroom.

One of his students recalled this week that she would visit his office with some work problem, talking nineteen-to-the-dozen. While she was talking and talking, he would just sit there patiently. When she finally stopped talking, he would usually ask a single, simple question that would lead to the solution of the problem.

His students will remember his clarity of mind, his patience and good humour. Another quote, "He was an invaluable mentor. Jim's contribution to my career and to my life was immense"

And Jim was an effective leader inspiring confidence and respect. He was ever demonstrating diplomacy and tact.

Even at the work place his colleagues witnessed that Jim was a **family man**.

A student remembers:

“It was very clear how much Jim loved his family. Apart from the pictures which took a place of pride on his desk, he would always have a twinkle in his eye and a smile when he spoke about Pat and the girls. At a certain time in the evening at work, he would sit in his office with his feet up on the radiator, smiling and talking on the phone with his home.

Then you knew to come back later with your little problems!”

Whenever he was late at work or on a trip to a spectrum meeting, we knew he first had to call home.

Jim would grin uncontrollably when he mentioned that the lady who sold him the Bleak House flat had come back in search of her cat? Fortunately Pat's cat kept on returning to base -- and Jim had to keep on returning the cat! This is a recorded case of a cat, the matchmaker.

In all this he was driven by his appreciation of love and life and his deep devotion as a Christian. In fact the Biblical scripture that describes Jim's character best is the command from Ephesians *“Be ye kind one to another, tender-hearted, forgiving one another”*. We are all witnesses that his life complied with that law. As a man of deep faith in God yet a researcher of meticulous scientific integrity, Jim was a rarity in today's world.

### **Things to remember**

His Aussie chuckle

His visit last year to the site of the new radio telescope in Sardinia during a meeting of the CRAF committee. He took the initiative to continue the tradition of placing something personal or valuable under the foundation of the new structure. So Jim buried his business card.

His quiet sense of humour and positive outlook, which would relieve the pressure when there were setbacks in projects or when lawyers were waging war or national delegations taking opposing positions.

And behind it all, a kind and gentle man of unfailing integrity and trust.

Upon closing I would like to refer to Psalm 90, where we read:

*“Teach us to number our days that we may apply our hearts to wisdom.”*

Jim, thank you for applying your heart to wisdom! We'll miss you. See you later.