



Women in Astronomy



Dr. Jessica Chapman

Head of National Facilities Support Group – ATNF

“One summer, after leaving school, I spent some weeks on my own in a house looking over the sea in Devon in England, and read Asimov's book 'The Universe'. I found it incredible that it was possible to learn so much about things that were so far away. I still do.

A couple of months later I started a maths degree at Edinburgh University in Scotland. There I did a first-year course on astronomy for arts students which was hugely enjoyable. I changed to a degree in astrophysics and spent two wonderful years at the Royal Observatory of Edinburgh. While there, I became interested in radio astronomy and applied to do further study at the Jodrell Bank Observatory in England. At Jodrell Bank I did a PhD on maser emission from evolved stars and have had a passion for masers ever since.

In 1987 I married and moved to Australia. Since then I have lived in Sydney and have worked mostly at the Australia Telescope National Facility (ATNF) which has three radio Observatories in New South Wales. I also worked for a few years at the Anglo-Australian Observatory. I have two children, who were both born in Sydney and have grown up here.

My current job is to lead the National Facility Support group at the ATNF. I enjoy motivating people and like to see that projects are done well and that initial ideas grow into something of value. I also spend about 20 per cent of my time on research and still work on masers and stellar evolution. It's a great feeling to understand something after puzzling about it for ages, or to make a new discovery”.



Dr. Jennifer Wiseman

**Hubble Space Telescope
Program Scientist - NASA**

Jennifer grew up on a farm in rural Arkansas and still lives in the countryside, now with her husband and three cats. Her interests include walking, nature and the relationship between religious faith and science.

“Based at NASA headquarters, I oversee the science program of the Hubble Space Telescope. I am also in charge of the science planning for some space telescopes in development, such as the Space Interferometry Mission and the Herschel Space Observatory. Prior to my current position, I served as a Congressional Science Fellow on the staff of the Science Committee of the U.S. House of Representatives. This was a very interesting opportunity to learn how to improve dialogue between the science community, the public and legislators, and to provide science advice to policy makers.”

Her scientific research focuses on studying star-forming regions of our galaxy using radio, optical, and infrared telescopes. In 1987 she was co-discoverer of comet Wiseman-Skiff. She has been appointed the next Chief of the Laboratory for Exoplanet and Stellar Astrophysics at NASA's Goddard Space Flight Center.

Prof. Jean Eilek

Professor of Physics & Astrophysics– New Mexico Tech



“How did I get into astronomy? I happened to read a well-done popular astronomy book, and fell in love with the field. I remember going out into the back garden, one cold, dark night, looking up at the sky and finding objects (stars, galaxies) that were discussed in the book. It was magic. That's when I decided to study astrophysics in university -- and I've never regretted it.”

“I'm a Professor at a university in the desert southwest region of the U.S. I also have a research position at a nearby radio observatory. I spend my days teaching and researching (using several telescopes around the world).

I astrophysics because it's so much fun. I love learning about distant objects -- trying to understand some mystery that we see in the data, and from that learning a bit more about how a galaxy works, or how black holes formed in the early universe. I also like astronomy because astronomers are good people. Through astronomy I have friends and colleagues all over the world -- for instance in Australia, India and several European countries. I always look forward to visiting them, exchanging scientific ideas and learning about their home countries.

What am I most proud of? I think it's whatever I've done that contributes to the success of others in the field. Maybe some of my research will help other astronomers in understanding some puzzle of their own. Maybe I've helped some of my students along the way, whether to understand a particular course, or to help them in their graduate research. Maybe I've provided some support and encouragement and guidance to younger astronomers along the way. I hope I've done all these things.”

Dr. Naomi McClure-Griffiths

Senior Postdoctoral Fellow – ATNF Sydney

Just five years ago, Naomi McClure-Griffiths was a Ph.D. student at the University of Minnesota, USA. She is now a Senior Postdoctoral Fellow, leads two major international collaborations to survey our Galaxy and has been described by a senior Australian Professor as being “one of the strongest leaders in astronomy of her generation in the world”.

For her insight into the structure of our galaxy, and her research leadership, Naomi has just been given the prestigious title ‘Physical Scientist of the Year’ in the Australian Prime Ministers’ Prizes for Science.



Naomi at the control desk of the 64-m Parkes Radio Telescope in Australia.

“One of the best things about being an astronomer is that I am always facing big questions about how the Universe works. Most people go into science because they are inherently curious. It is that curiosity that drives people to do good science and it's a necessary trait to make it through the difficult times.”



Born in Atlanta, Georgia, Naomi fell into astronomy, having entered college hoping to do Physics or French. “You can study really small or really big things in physics. The public finds the really big things more interesting so I thought there was a better future in that.”

She moved to Australia in 2001, where her research focused on the structure and dynamics of hydrogen gas in our galaxy. Hydrogen is the most pervasive atom in the universe and it acts as a tracer, outlining the shape of the Milky Way and telling the story of the evolution of the gas and dust between stars. In 2004 she expanded her research to include the structure of the galaxy as a whole. As a result, she discovered a new spiral arm, causing astronomers to redraw the map of the galaxy.

