

The Scientists

Minnie Yuan Mao  download



Have you ever noticed that the 'hunter' Orion and the giant scorpion Scorpius are never in the sky together? Legend has it that Gaea, Goddess of the Earth, sent Scorpius to kill Orion because he threatened to kill all the animals on the face of the Earth! Now if you look at the night sky you will notice that as soon as Scorpius rises Orion sets, so they can never be in the sky at the same time.

I've always been fascinated with the night sky and loved star and planet gazing. Unfortunately I also love sleep. A lot.

This was a huge dilemma for me when I was a younger, as I wanted to study astronomy and yet I did not want to give up my precious sleep hours. Furthermore, traditional optical

astronomy is marred by all sorts of strict conditions – you can't observe if it's rainy or cloudy. I was very excited then to discover that, at certain wavelengths, namely radio wavelengths (which are longer than optical wavelengths), we can observe the sky not only during the day, but also through cloud and even rain!

Radio astronomy is exactly the same as optical astronomy, only we are looking at the sky using a different wavelength. In fact, astronomy really is the study of celestial objects using all different wavelengths so we can understand them. So, at optical wavelengths (what our eyes see) we can see, for example, starlight, whereas at radio wavelengths we can see streams of electrons.

I also find the size of the Universe fascinating – the universe is so vast that it even takes light billions of years to travel from one side to the other. This also means that you are effectively looking back in time every time you look at the stars!!

My PhD project involves a region of sky that we have seen at radio, optical, infrared and X-ray wavelengths. By studying galaxies at different distances from us, we are also studying galaxies as they were at different times in the Universe. Using this information, I hope to find out how galaxies (such as our Milky Way) were formed.

[TOP](#) | [HOME](#)
www.youngtassiescientists.com | yts@youngtassiescientists.com | Copyright 2008. All rights reserved

nd