

Welcome

Tetsuo Hasegawa (National Astronomical Observatory of Japan)

Good morning everyone, and welcome to Santiago!

I am Tetsuo Hasegawa, the Director of the NAOJ Chile Observatory, a branch of the National Astronomical Observatory of Japan that supports its activities in Chile. I am supposed to give a welcome address on behalf of the East Asian part of ALMA, namely, Japan, Taiwan, and Korea, but, instead, I would rather tell you my small story.

It was almost 40 years ago. I was spending a week of my summer vacation in the mountains in mid Japan. After all the lights were put off and the generator stopped, I slid out quietly the cottage...

Silence dominates. When I look up, the grandeur of the Milky Way splits the sky into two, and cascades down into the woods to the south. I lay myself down on the grass of a meadow, and stare at the sky.

Then, all of a sudden, I notice that the sky starts to show its depth. The bright stars, Vega, Altair and others, are close to us. Many less bright stars here and there are a bit farther away. And beyond all these distinguishable stars, the vast flock of faint stars extends out into the three-dimensional depth of space.

We live in a vast flat disk called Milky Way Galaxy. Our Sun is one of a few hundred billion stars that form the disk. Our Earth is revolving around the Sun on its very small orbit several billion times smaller than the Milky Way disk. However, on that tiny Earth, we see this rich and beautiful flourish of life, and we humans live our life crying and laughing.

When I faced the glorious scene of the universe with the Earth on my back, I literary

felt and experienced that I am connected with the vast disk of the Milky Way Galaxy --- a Galactic experience.

The following is my attempt to translate a Japanese “tanka” written by Eiji Sawada:

*We all, just a continuation of a dream of stellar fragments
that broke up into the darkness of space*

As many of you know, the life on earth, including ourselves, is made of stellar ash. Because stellar ash is everywhere in the Milky Way, it is quite probable that some form of life has formed and evolved on some other planets. I imagine that those life also see “the continuation of the dream of stellar fragments” somewhere in the Solar System or on some planets around other stars.

We live in a highly evolved civilization. Streets are brightly illuminated throughout the nights and radio waves fly around to carry messages to cellphones. The science that is driving these technology is what our predecessors have learned by studying our Mother Nature. However, the advanced civilization driven by science has taken away our Mother Nature from us. We cannot see the grandeur of the Milky Way in town. The human-made radio waves jam the sensitive receivers on radio telescopes to hide the ultimately faint signal from stars.

Are we satisfied by the current civilization and do not want to learn any more from our Mother Nature?

I am not pessimistic. It is not too late. I believe the intelligence of the humans is just good enough to prevent closing our eyes (or ears) to the nature forever.

I sincerely hope that this week of IUCAF school of spectrum management turns out to be insightful and fruitful to all of us in this regard, too.

Thank you very much.