

# Space Day: Sky's the limit for Hong Kong's involvement in the nation's space endeavors

I was honored and privileged to be invited by the venerable and highly influential Chinese Society of Astronautics to give a presentation in Hefei during the annual Space Day of China celebrations from April 23 to 26, following their visit to the University of Hong Kong (HKU) and our Laboratory for Space Research in March. This important national showcase of all the various strands of the diverse Chinese space program gathered over 3,000 delegates from China and overseas. It was an extremely impressive, very well-organized, highly respectful and thoroughly enjoyable experience. It only reinforced the tremendous progress and remarkable achievements of the rapidly burgeoning Chinese space program. The quality of some of the significant topic video preliminary presentations alone was exceptional and certainly worthy of an edutainment immersive experience for the general public.

En route, I was in the historic ancient capital city of Nanjing to visit some of Nanjing University's senior colleagues. This was because of their exciting developments in adding a new School of Deep Space Exploration Science and Technology to their already well-respected School of Astronomy and Space Science. In the evening, I walked around a major mall in the city center.

By chance, there was an American-style basketball slam dunk event on the plaza just outside. The massive, modern mall was packed with mainly European luxury goods shops with an outstanding art museum on the top floor with an American artist's work front and center outside. There was even a selection of electric car showrooms on the bottom floor. It was a vertically integrated cornucopia of culture, consumption, and cars. It was seamless, convenient and practical. Indeed, electric cars are now everywhere — signs of another sea change in transport and the myriad of scooters that have all been electric for some time. The reduction in pollution since my first Nanjing visit several years earlier was palpable.

Outside were Burger King, KFC, McDonald's, Starbucks and other outlets everywhere for fast, convenient Western "cuisine." It struck me that any so-called great power decoupling is not evident from the Chinese side in these aspects and only demonstrates how much there is to lose.

I left for Hefei the next day via the high-speed railway station — a cavernous gleam-



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ing temple to public transport on the grandest scales. It was more like a modern airport terminal than conventional concepts of train stations in the West. It's but one more sign of the mind-boggling transformation of the modern Chinese State over the last 20 years in terms of the world's best infrastructure for its people.

Likewise, in Hefei, the China Space Day event itself was held in a fantastic exhibition complex covering a vast footprint, with the event held across multiple enormous pavilions.

There was a smattering of foreigners present — French, British, American, other Europeans, Indian subcontinent citizens, and even an Armenian astronaut — and then myself as a humble Australian.

In talking to some of these overseas guests, I learned of American and European companies, organizations and institutes signing various memorandums of understanding and agreements with the Chinese Astronautics Society and other major Chinese bodies. This is a very positive sign, showing that in this field, at least mutually beneficial, significant international and particularly American cooperation is still alive and well. No one in this community wants to decouple, disengage and become isolationist — quite the reverse!

In many presentations at the meeting sessions and events I attended, it was also abundantly clear that China is very earnest in its desire to collaborate internationally in an open-handed way for win-win synergy and partnership. There is no equivalent of the "wolf" approach for the Chinese Space Station and the European institutes and major aerospace companies are well aware.

My keynote talk was to introduce and showcase not just our HKU Laboratory for Space Research but also to cover the status of the current slowly emerging "NewSpace"

ecosystem in the Hong Kong Special Administrative Region. Of all our Hong Kong-based universities, the Hong Kong Polytechnic University is the most productive and established tertiary education institute in space activities, with significant successes over many years in space engineering, contributing robotic arms and cameras to China's Chang'e moon and Tianwen Mars missions. Chinese University of Hong Kong and Hong Kong University of Science and Technology are now rapidly engaging too.

Outside of our universities, we have a not-for-profit NGO called the Orion Astropreneur Space Academy, which is beginning to get traction in opening young minds, investors and businesses to the importance of STEM education and the potential of the NewSpace economy for the HKSAR. There are also companies like Silkwave and the Hong Kong Aerospace Technology Group, together with new mainland players entering the HKSAR scene like Origin Space and AdaSpace. This trickle can become a flood if we get better traction and engagement from the HKSAR government. A governmental green light of explicit support for NewSpace endeavors would, I think, help unlock the strong investor interest that is there and as already reflected in the tremendous growth in mainland space tech startups that have grown from about 100 to over 500 just in the last few years.

For me, the HKSAR has some robust characteristics that can make a difference in this area, not just for our great city but also for the mainland NewSpace ecosystem. In a high-level discussion forum at the Hefei China Space Day, when I was asked how the HKSAR can contribute to mainland space endeavors, I was keen to point out that apart from the basic space science and technology research occurring in our world-leading universities, Hong Kong has an enormously successful regulatory and compliance framework and vital fintech infrastructure that could play a significant role in facilitating investment and providing investor confidence in NewSpace activities. As a city, we should step up to the plate and take advantage of China's emergence as an undisputed significant spacefaring power with a growing entrepreneurial and commercial element.

*The views do not necessarily reflect those of China Daily.*