



### 9<sup>th</sup> International Symposium on Space Radiation Research and Particle Radiotherapy

Dear colleagues,

It is our great pleasure and an honor to extend a warm invitation to participate in the 9<sup>th</sup> International Symposium on Space Radiation and Particle Radiotherapy, which will be held in **Suzhou, China, on April 15-18, 2020**.

The meeting will also include:

- 1st International Workshop on Space Neuroscience,
- 2nd Chinese Summit on Space Radiation Research,
- Sino-Japanese Bilateral Meeting on Radiation Research,
- Annual Meeting of Chinese Association of Chronobiology,
- Annual Meeting of Jiangsu Association of Radiation toxicology.

This is the 20<sup>th</sup> anniversary of International Symposium on Space Radiation and Particle Radiotherapy first held in Arona, Italy in 2000 with subsequent meetings in Japan, USA, Russia, Germany, and China. In the last few years, exciting discoveries and events in space research have been made, including Hayabusa2 from Japan and OSIRIS-Rex from United States landed on Bennu; NASA released the result of "twins study"; meanwhile Starliner from Boeing and Crewed Dragon from SpaceX planning to send tourist to space. NASA now committed the long-term Artemis program, which includes the mission bringing the first women and next man with the ORION spacecraft to the moon. These events stimulate humanity's interest in space exploration and the possibility clue of life origin, in response to which China has announced its plan to build a space station to be completed by 2020, and NASA and other space agencies are planning missions to Mars.

Exposure to space radiation, in particular Galactic Cosmic Rays, is a major concern for human health during long duration space travel. On the other hand, similar particles have been found to have beneficial effects on Earth, increasingly being used in cancer radiotherapy. In China alone, about ten contracts for the construction of new particle therapy facilities were signed last year and more are being planned, and growing interest for facilities in the USA. Space radiation research has made significant progress since 2000 with the expansion of ground based accelerator facilities, the development of space radiation quality factors and detailed cancer risk uncertainty assessments, establishment of cognitive detriments as an important risk factor, and the first radiation measurements on the surface of Mars. The 9<sup>th</sup> International Symposium will be an opportunity to discuss critical research areas and solution methods for the next 20 years of heavy ion research. With this as a backdrop, we hope you join us in Suzhou to share your recent findings and thoughts on improving the efficacy and safety of particle radiotherapy and advancing research in the assessment and mitigation of the risks from space radiation.

On behalf of the Organizing and Program Committees, we cordially invite you to join us in Suzhou for both formal and informal discussions on the state of research in space radiation and particle therapy. Please mark your calendar for this special event. For more details, please visit the conference website at: <a href="www.issrprt2020.com">www.issrprt2020.com</a> and feel free to share this invitation with your colleagues who may be interested in these areas

Sincerely,

Zhifang Chai & Tom K. Hei

Presidents of 9th International Symposium on Space Radiation Research and Particle Radiotherapy





#### 1. Topics:

- Towards Space Exploration: Radiation Biological Basis
- Space Radiation Risk and Countermeasures: Physical and Biological Mechanisms, Modelling an d Simulations
- Dosimetric Measurements and Related Models, Radiation Detector Developments and Character ization
- Charged Particle Therapy: Biological & Physical Approaches
- Clinical Outcomes of Charged Particle Therapy
- Track Structure, Microdosimetry and Nanodosimetry for Charged Particles
- Individual Sensitivity
- Systems Biology and Multi-scale Modeling
- Central Nervous System Effects including Cognition, Performance and Late Effects
- Cancer Radiobiology
- Non-Cancer Radiobiology
- Impact of Multiple Space Stressors (radiation, altered gravity, magnetic fields, circadian rhythm,
- International Standards for Astronauts and Tourists
- **Accelerator Facilities**

# 2. International Organizing Committee

Zhifang Chai	Francis A. Cucinotta	Tom K. Hei	Guenther Reitz
Jiade Lu	Bairong Shen	Jianping Cao	Guangming Zhou

Veronica Haynes

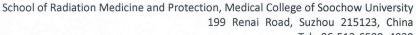
# 3. Local Organizing Committee

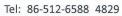
Chair: Jianping Cao Member: Lei Chang Tel: +86-512-6588 0052 Email: changlei@suda.edu.cn

> Hailong Pei Tel: +86-512-6588 2451 Email: hlpei@suda.edu.cn Anging Wu Tel: +86-512-6588 4829 Email: aqwu@suda.edu.cn Jiaying Xu Tel: +86-512-6588 0052 Email: xujiaying@suda.edu.cn Benxing Zhu Tel: +86-512-6588 0052 Email: bxzhu@suda.edu.cn

# 4. Registration fee:

	Early registration	Late registration	On-Site registration
	(before Feb. 28th)	(before March 15th)	(April 15th)
Full	2000¥/300\$	2500¥/380\$	3000¥/450\$
Student	1000¥/150\$	1500¥/230\$	2000¥/300\$
Accompany	1000¥/100\$	1000¥/125\$	1000¥/150\$







Deadline for Abstract submission: Feb. 15th

Early registration: Before Feb. 15th

**On-site registration:** April 15th

Check-in and On-Site registration: April 15th

Opening ceremony: At 9:00 on April 16th
Close ceremony: At 16:00 on April 18th

6. Contact information:

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