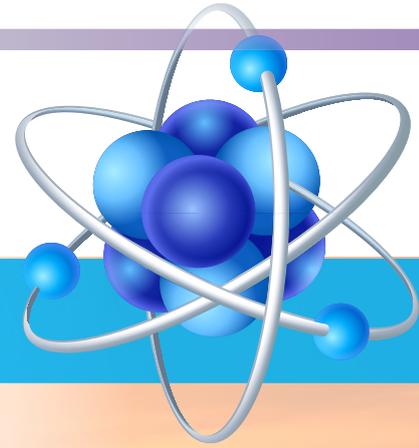


Physics

Newsletter

April | 2020



Message from the Head

Dear Colleagues, Students and Alumni,

Happy New Year of the Rat!

First, I am honored to serve as the Head of Department of Physics at the University of Hong Kong beginning this year, and wish to thank our former Head, Professor Maohai Xie, for his remarkable service and contributions to the Department during the past three years.

Since I joined the department in 1992, it has undergone significant transformation in its development, seeking to sustain and enhance its excellence through high-quality teaching and high-impact research, so as to provide the best education for our students. Nevertheless, we are now facing many new challenges that require our collective endeavors to meet them head-on. To achieve this, apart from your continuous support, I am committed to create and secure a satisfactory work environment of collegiality and mutual support in the whole department, and to handle departmental matters by applying a single standard and following the three principles of justness, fairness, and openness.

And last but not least, I will try my best to be a good servant to the Department and to provide my strong support for the newly established Research Division of Physics and Astronomy.

Sincerely,



Z. D. Wang
Professor, Chair of Physics
Head, Department of Physics

Farewell to ...

- Chair Professor Kwong Sang Cheng has retired. He joined the department in 1988.
- Chair Professor Jian Wang has retired. He joined the department in 1993.
- Ms. Joe Poon of general office has left. She joined the department in 1995.
- Ms. Michelle Lo of general office has left. She joined the department in 2012.
- Ms. Rachel Liu of general office has left. She joined the department in 2016.

Editors:

Dr. Kai-Ming Lee
Prof. Quentin A. Parker
Dr. Jenny Hiu Ching Lee

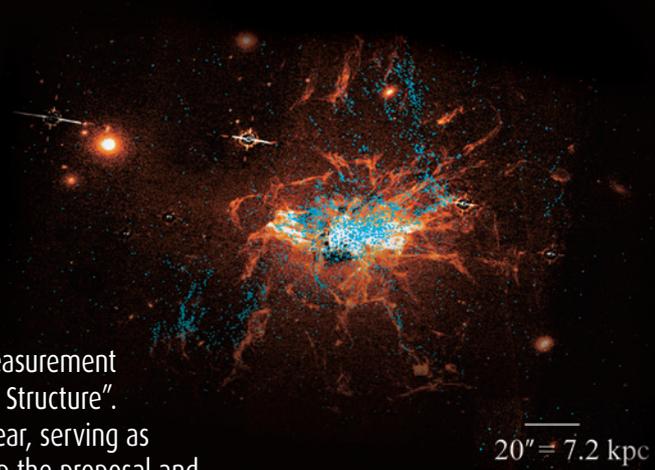


<https://www.physics.hku.hk/>

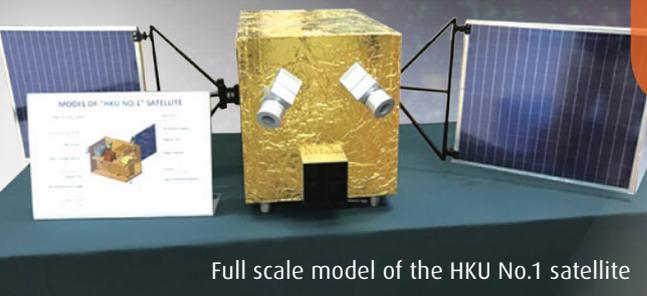
$E=mc^2$

Awards and Research Highlights

- Prof. Wang Yao has been promoted to Chair Professor. He also receives the Croucher Senior Research Fellowship Award 2020.
- Profs. Xu and Xie and collaborators receive the Ministry of Education Higher Education Outstanding Scientific Research Output Award (2nd class).
- Dr. Lim and collaborators receive Collaborative Research Fund Award on "Measurement of the Neutrino Mass through the Effects of Relic Neutrinos on Cosmological Structure". They were awarded funding of HK\$2,728,769 (excluding on-costs) for one year, serving as seed money and exploratory funding for the project team to further develop the proposal and seek full-scale funding in the future.
- Guo, et. al., "Searching for dark photon dark matter in LIGO O1 data", Nature Communications Physics, Vol.2, 155:1-7, 2019.
- Lim, et. al., "Sustained formation of progenitor globular clusters in a giant elliptical galaxy", Nature Astronomy volume 4, 153-158 (2020).
- Prof. Parker and Dr. Su were awarded ~15Million HKD (~\$11.9M HKD after HKU top-slice) from the RGC Research Grant Matching Scheme (see below for more details of overall LSR funding under this scheme).



Spatial relationship between progenitor globular clusters (blue dots) and cooled intracluster gas (filamentary structure coloured red to white) around the giant elliptical galaxy at the centre of the Perseus galaxy cluster.



Full scale model of the HKU No.1 satellite

News of Laboratory for Space Research: Massive funding boost

LSR Director Quentin Parker and deputy directors Meng Su and Joe Michalski submitted two proposals to the first round of the new Research Grant Matching Scheme (RGMS) back in October 2019. We were successful. These two proposals, out of the 200+ supported across HKU, won 22% of the entire first round funding to HKU! Remarkable. This is ~20Million HKD (before 18.5% university top slice).

The budgets for these were previously drawn up and now approved. Most of the money is for our space missions and support staff. The NJU-HKU No.1 satellite is fully complete and now has a launch date of July 25th this year. We already have an MoU for our 2nd satellite - a small IR telescope due for launch early next year (it is already being built). There are considerable costs involved supporting these two missions.

However, to benefit LSR and department members more broadly Prof Parker has established an on-going travel fund, open to all members for the next 3 years of \$300K/year. He has also established a type C PhD scholarship for any LSR member to bid for with a total value of \$650,000HKD over 3 years. Finally he is establishing a full time LSR admin position, to be based at Cyberport, that will service the needs of all LSR members as required regardless of department, faculty or appointment level. This will be a 3 year post initially.

Student News

19th Elected Executive Committee, Physics Society:

Chairperson:

Wong Ching Hin Jason

Internal Vice-Chairperson:

Liu Rui Zhe Richard

External Vice-Chairperson:

Zou Xiang Simba

General Secretary:

Cheong Tsz Ho William

Publications and Publicity Secretary:

Wong Hoi Ying Melody

Annual Dinner of Physics Society

The Annual Dinner was held successfully on 8th November, 2019. As a traditional formal event of Physics Society, the dinner provided a harmonious platform for undergraduates, postgraduates, alumni and staff to socialize and exchange ideas.

This year, Mr Prince Chan Chun-lam, an assistant curator of the Hong Kong Space Museum, was invited as the guest speaker to dine and share his career life.

