

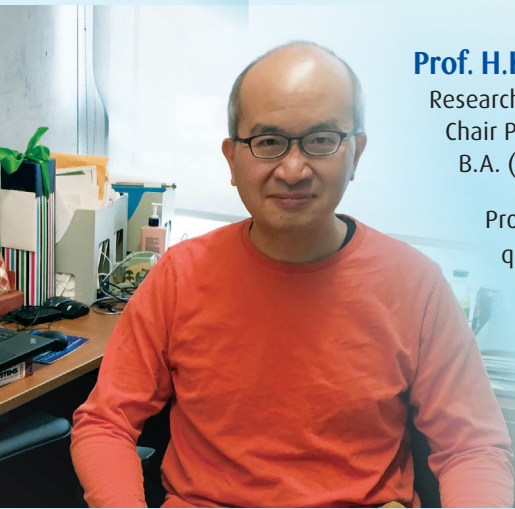
Physics

Newsletter

October | 2020



New Member of the Department



Prof. H.K Lo

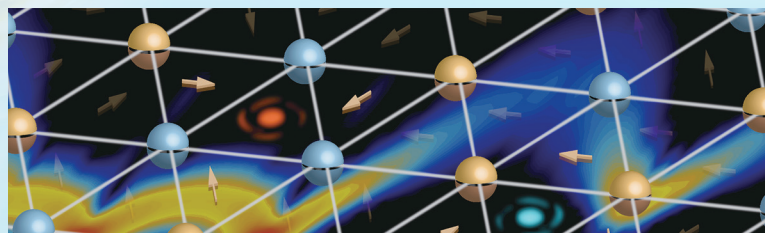
Research Division Director, Research Division of Physics and Astronomy
Chair Professor
B.A. (Cantab); M.S., Ph.D. (Caltech).

Prof. Lo works on quantum information science, focusing on the theory and experiment of quantum cryptography. He also works on photonics quantum repeaters. The Holy Grail is a Quantum Internet where quantum signals are transmitted between any two locations on Earth. Among other things, this will enable digital communication with information-theoretic security.

Prof. Lo is a Fellow of the American Physical Society (APS) and a Fellow of the Optical Society (OSA). Before joining HKU, he was a tenured Professor of Physics and Electrical and Computing Engineering (ECE) at the University of Toronto.

Promotions, Awards and Research Highlights

- ▶ **Dr. Y.J. Tu** has been promoted to Associate Professor.
- ▶ **Dr. J.H.C. Lee** has been promoted to Associate Professor.
- ▶ **Prof. S.J. Xu** receives a grant of RMB 3M from Science and Technology Innovation Commission of Shenzhen Municipality. In the awarded project, entitled "Optics and Optoelectronic device applications of super wide bandgap diamond", optics and optoelectronic device demonstration of CVD grown diamonds will be investigated.
- ▶ **Dr. Z.Y. Meng's** research group and collaborators at the Institute of Physics at the Chinese Academy of Science, Songshan Lake Materials Laboratory, Beihang University in Beijing and Fudan University in Shanghai, has provided a successful example of modern era quantum material research. This has been reported in Nature Communications 11, 1111 (2020), <https://www.nature.com/articles/s41467-020-14907-8>. See also HKU press release: <https://www.hku.hk/press/press-releases/detail/21179.html>.



Editors:

Dr. Kai-Ming Lee
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<https://www.physics.hku.hk/>

News from the Laboratory for Space Research



- On July 25th 2020 the “Lobster eye” X-ray satellite “Dark Matter Hunter” which is co-led by HKU Physics Department and LSR was launched to much publicity in China and globally, see HKU press release: https://www.hku.hk/press/news_detail_21360.html
- This is the first ever HKSAR space science mission that would not have been possible without the enormous efforts of Dr. M. SU of the Physics department.
- In June 2020 the LSR received confirmation that we had been successful in the 2nd round of the RGC “Research Matching Grant Scheme”. We were awarded a further \$13.9Million HKD which, after the 25% HKU, Faculty of Science and Physics Department top-slices leaves \$10.49million HKD for our projects. STOP PRESS: We have also just heard (August

31st) that two further LSR submissions for round 4 of this scheme by Parker and Su have also been supported. These should bring a further \$27million HKD to the LSR after 25% HKU top slice.

- The LSR has had another very busy summer with 12 interns being supervised, some remotely due to Covid-19. We have hosted high school students, HKU Summer Research Fellows and undergraduates from India and including 5 students from the University of Chicago under Dr. P.M. Saz Parkinson.

Student News

- Mr. Lao Xiangzhou has passed his oral examination for PhD degree and received a 3-year postdoc offer from Yale University.
- Mr. Cao Leonard Weihao, 2019 BSc (double major in Physics and Mathematics) is now pursuing a PhD degree in Physics at University of California, San Diego.
- Mr. Hong Eric Pooi Seong, 2019 BSc (Physics) is now pursuing a PhD degree in Physics at University of Pennsylvania.
- Miss Zhao QingQing, 2020 Bsc (Physics) is scheduled to attend PhD studies at Stanford University in the Fall of 2020.

Corrigendum: for the record

- Profs. S.J. Xu and M.H. Xie and collaborators received the Ministry of Education Natural Science award (2nd class), not “Higher Education Outstanding Scientific Research Output Award (2nd class)” as reported in 2020 April issue.



20th anniversary of Physics Society

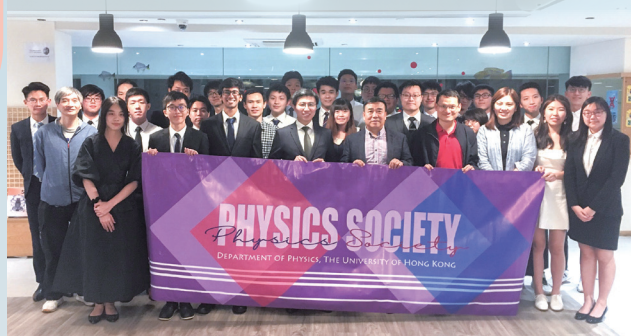
The 20th anniversary of Physics Society, Department of physics, The University of Hong Kong is coming. Over the past two decades, never have we stopped organizing numerous activities, such as annual dinners, quiz contests and orientation camp, targeting a variety range of audience. From newly admitted faculty’s freshmen to warmhearted previous executive members, our mission and vision – promoting physics and fostering communication among staff, members, freshmen and other academic societies, have been successfully infiltrated in all our activities.



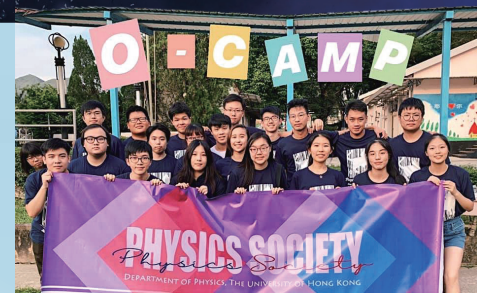
O-camp of 2012

Since this year marks the 20th anniversary of Physics Society, Mr. Wong Ching Hin, the chairperson of 19th Executive Committee of the Physics Society, gave a speech to illustrate the current situation and prospect of the Physics Society.

“This year has been challenging for all of us around the world. Be it the epidemic or social unrest, never have we ever faced such weird, if not bizarre, time in this century. We hope all of you are staying well in this and look forward to seeing you in the upcoming year. The Physics Society has always been supportive to physics students, putting our strenuous effort in assisting you through all of these.



Annual dinner of 2019



O-camp of 2019

醒閣, the 1st Executive Committee of Physics Society, was founded in 2001 with the utmost support of the Department of Physics. Ms. Chui Man Yee, shouldered the responsibility and took up the challenges to start the unbelievable journey of the Physics Society since then, holding a modest yet noteworthy belief, to support and connect physics students and staff in a great academic community via various activities and services.



Superpass Dinner in 2018

In the advent of the 20th anniversary of the Physics Society, it is ashamed that we may not hold any special celebration, as we always attach great importance to your safety. Despite undergoing a tough period, we still have the vision of the booming and flourishing future of the Department of Physics.”