## 2016 Pan Asia Number Theory Workshop

## Wen-Ching Winnie Li



The Pan Asia Number Theory (PANT) Workshop was initiated by John Coates and a group of established number theorists with Asia origin. The purpose is to promote high level number theory research in Asia. It provides a platform for Asian number theorists (in broad sense) to communicate and collaborate with each other and to showcase their research accomplishments. The initial Scientific Committee consists of John Coates (Cambridge U.) from Australia, Ngo Bao Chau (U. Chicago) from Vietnam, Young Ju Choie (Postech) from Korea, Tamotsu Ikeda (Kyoto U.) from Japan, Kazuya Kato (U. Chicago) from Japan, Minhyong Kim (Oxford U.) from Korea, Masato Kurihara (Keio U.) from Japan, Jianya Liu (Shandong U.) from China, Sujatha Ramdorai (U. British Columbia) from India, and Ye Tian (Chinese Academy of Sciences) from China. In 2012, Taiwan and Singapore joined this group, represented by Wen-Ching Winnie Li (Penn State U.) from Taiwan and Wee Teck Gan (National U. of Singapore) from Malaysia. In 2015 Dipendra Prasad (Tata Institute of Fundamental Research) from India also joined the Scientific Committee.

The countries that join PANT take turns to host the annual PANT workshop. The speakers are either of Asia origin or work in an institution in Asia, but they are not limited to the countries represented by the Scientific Committee members. For instance, past speakers included number theorists from Iran and Israel. The first PANT was held in Pohang, Korea in 2009; the subsequent ones were in Kyoto, Japan (2010), Beijing,

China (2011), Pune, India (2012), Hanoi, Vietnam (2013), Pohang, Korea (2014), and Sanya, China (2015).

Organised by Chieh-Yu Chang (National Tsing Hua University, Taiwan), Wen-Ching Winnie Li (Penn State University, USA) and Yifan Yang (National Chiao Tung University, Taiwan), the 2016 PANT Workshop was held July 11–15 in Taipei, Taiwan, hosted by the Institute of Mathematics, Academia Sinica. The financial support for this workshop came from Academia Sinica, National Center for Theoretical Sciences, and Mathematics Promotion Centre in Taiwan. The warm and generous hospitality from the hosting institution was deeply appreciated by the 70 participants from all over the world.

On the scientific side, there were 25 very interesting talks covering diverse topics in number theory, given by 20 invited speakers and 5 scientific committee members. The most common subject areas are Iwasawa theory, automorphic forms/representations, and p-adic Hodge theory. For the first time in PANT history, eighty percent of the invited speakers were junior researchers ranging from PhD students to assistant professors. Despite their relative young age, their results are very impressive and many are excellent speakers. This bodes well for the future of number theory in Asia.

In summer 2017, a conference commemorating Kenkichi Iwasawa's centennial birthday will be held in Tokyo, Japan. Because of this event, the next PANT will be held in Singapore two years from now, June 25–29, 2018.