The 4th Conference on Computational and Mathematical Population Dynamics

North University of China, Taiyuan, May 29 - June 2, 2013

by Shigui Ruan

Late May was right in the middle of spring in Taiyuan, a northern city of China. The North University of China, located by the eastern bank of the Fen River and the Erlong (double dragon) mountain, was the site of the 4th Conference on Computational and Mathematical Population Dynamics (CMPD4), May 29 - June 2, 2013. More than 350 participants from 23 countries participated in this international conference; among them were more than 150 graduate students and post-doctoral fellows.

There were eight plenary lectures: Odo Diekmann (Utrecht U., The Netherlands), "Infectious disease transmission on dynamic sexual networks"; Hanna Kokko (The Australian National U., Australia) "Is mother nature shortsighted? Evolutionary processes do not maximize population performance"; Pierre Magal (U. of Bordeaux, France), "Bifurcation in structured population dynamics"; Sebastian Schreiber (UC at Davis, USA), "Population persistence in the face of uncertainty"; Zhilan Feng (Purdue U., USA), "Bifurcation analysis of a model for plantherbivore-predator interactions and its applications"; Hisashi Inaba (U. of Tokyo, Japan), "On recent developments in the theory of basic reproduction number";

Frithjof Lutscher (U.of Ottawa, Canada), "Population spread in patchy landscapes"; Zhen Jin (North U. of China, China), "Epidemic models on complex networks."

There were 200 talks in 20 different sessions. Sessions topics included gene regulation and molecular biology, Effects of Wolbachia on insect population dynamics, stochastic models of gene expression, population game dynamics, climate change and vector borne diseases, modeling of infectious diseases, influence of heterogeneity in disease dynamics and control, adaptive dynamics, spatial dynamics in population biology, immune modeling, modeling antibiotic-resistance bacteria, within-host models as building blocks for epidemic models, control problems in population biology, modeling of cancer growth and treatment, viral dynamics and drug treatment, bifurcation theory and applications in biology, structured population dynamics, and some other related subjects in population dynamics.

The local organizers did an excellent job in organizing this event. Conference participants were extremely impressed and appreciated the warmness and friendliness of the local people and volunteers. Taiyuan is well-known for noodles, foods, and Fen jiu (alcohol), which conference participants really enjoyed through the different daily menus.

On top of the tight talk schedule, there was a concert on local and Chinese folksongs and music performed by Faculty members and graduate students in the Department of Music at the North U. of China. In the last day, an excursion was scheduled to visit Pingyao city (a UNESCO World Heritage Site).

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Group photo of the CMPD4.