THE UNIVERSITY  OF HONG KONG

Institute of Mathematical Research
Department of Mathematics

GEOMETRY SEMINAR

Enumerating the fake projective planes

(*Joint work with Tim Steger*)

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Abstract

A fake projective plane (fpp) is a smooth compact complex surface, not biholomorphic to, but having the same Betti numbers as, the complex projective plane $P^2(\mathbb{C})$. Gopal Prasad and Sai Kee Yeung showed that the fpp's all belong to a small number of classes. Steger and I found all the fpp's in each class, and found a presentation for the fundamental group of each fpp. Altogether there are exactly 100 fpp's, up to biholomorphism.

Date:	April 23, 2018 (Monday)
Time:	2:30 – 3:30pm
Venue:	Room 210, Run Run Shaw Bldg., HKU

All are welcome