



MINI COURSE

Alexander invariants and holomorphic maps onto curves

Professor Anatoly Libgober
University of Illinois at Chicago

Abstracts

Lecture 1

November 25, 2013 (Monday), 3:30 – 5:00pm

Alexander invariants of fundamental groups of quasi-projective varieties and holomorphic maps onto curves

In this talk we consider a generalization of invariants of finitely generated and finitely presented groups which in the case of knot groups are equivalent to Alexander polynomials. For the groups which are the fundamental groups of quasi-projective varieties there is close relation between Alexander invariants and holomorphic maps onto hyperbolic curves. I will discuss a Hodge theoretical proof of structure results for Alexander invariants and their applications in the case when quasi-projective variety is a complement to a complex plane curve or arrangement of lines.

Lecture 2

November 28, 2013 (Thursday), 3:30 – 5:00pm

Characters of fundamental groups and orbifold pencils

In this talk I will discuss a generalization of the results in previous talk which give correspondence between characters of fundamental groups and orbifold pencils. These are results on recent joint work with Artal Bartolo and Cogolludo-Augustin.

Room 210, Run Run Shaw Bldg., HKU

All are welcome