

THE MATHEMATICS OF KNOTS: THEORY AND APPLICATION

CONFERENCE PROGRAM

HEIDELBERG, DEC. 15 - DEC. 19, 2008

Meeting Room: IWR Seminar Room 432 (Im Neuenheimer Feld 368)

MONDAY, Dec. 15

9:00 am - 10:00 am

Louis Kauffman

Unitary Representations of the Artin Braid Group and the Quantum Algorithms for Jones Polynomials

*** COFFEE ***

10:45 am - 11:45 am

Heather Dye

The Arrow Polynomial

*** LUNCH ***

1:30 pm - 2:30 pm

Hugh Morton

Relations between Homfly and Kauffman satellite invariants

2:45 pm - 3:45 pm

Stavros Garoufalidis

The HOMFLY polynomial of a 3-manifold, the trilogarithm and Painlevé I

*** COFFEE ***

4:15 pm - 5:15 pm

Sergei Chmutov

Combinatorics of Gauss diagrams and the HOMFLYPT polynomial

TUESDAY, Dec. 16

9:00 am - 10:00 am

Cameron Gordon

Exceptional Dehn Filling

*** COFFEE ***

10:45 am - 11:45 am

Vassily Manturov

Which Khovanov homology theory is the right one?

GROUP PHOTO

*** LUNCH ***

1:30 pm - 2:30 pm Jacob Rasmussen
Dehn filling and the Thurston norm

2:45 pm - 3:45 pm Joan Licata
Linearized homology for grid number one knots in $L(p,q)$

*** COFFEE ***

4:15 pm - 5:15 pm Denis Ilyutko
Graphs-links, Virtual Links, Kauffman bracket and simplicial presentation of Khovanov homology

WEDNESDAY, Dec. 17

9:00 am - 10:00 am Andrew Ranicki
Noncommutative localization in algebra and topology

*** COFFEE ***

10:45 am - 11:45 am Sylvain Cappell
The Role of Knot Theory in Transformation Groups

*** NO TALKS THIS AFTERNOON ***

*** CONFERENCE DINNER 7:00 pm ***

THURSDAY, Dec. 18

9:00 am - 10:00 am Kent Orr
Surfaces knots and iterated intersection theory

*** COFFEE ***

10:45 am - 11:45 am Martin Scharlemann
Fibered knots and Property 2R

*** LUNCH ***

1:30 pm - 2:30 pm De Witt Sumners
Random Knotting and Viral DNA Packing

2:45 pm - 3:45 pm Dorothy Buck
Topology of DNA-Protein Interactions

*** COFFEE ***

4:15 pm - 5:15 pm Daniel Moskovic
Surgery equivalence classes of knots coloured by metabelian groups

FRIDAY, Dec. 19

9:00 am - 10:00 am Sofia Lambropoulou
Singular knots and Yokonuma-Hecke algebras

*** COFFEE ***

10:45 am - 11:45 am Jozef Przytycki
Skein module motivation for Gram determinants of planar curves

*** LUNCH ***

1:30 pm - 2:30 pm Barbara Jablonska
Surfaces associated to a knotted space curve

2:45 pm - 3:45 pm Louis Kauffman
Extending the Jones Polynomial for Virtual Links

*** COFFEE ***

4:15 pm - 5:15 pm Stefan Friedl
Symplectic 4-manifolds and fibered 3-manifolds

***** END OF WORKSHOP *****

HAPPY HOLIDAYS

and a

HAPPY NEW YEAR