Knot Theory and Its Applications to Physics and Quantum Computing

Conference honouring Jozef H. Przytycki on his 60th birthday

University of Texas at Dallas
January 6-9, 2015

Knots

Statistical Mechanics

Hochschild homology

Persistent Homology

Khovanov homology

Categorification of skein modules

Jones polynomial

Skein Modules

Plenary speakers
Anna Beliakova
Bob Coecke
Louis H. Kauffman
Mikhail Khovanov
Peter Ozsvath
Zhenghan Wang

Organizers
Mieczyslaw K. Dabkowski
Tobias Hagge
Valentina S. Harizanov
Viswanath Ramakrishna
Radmila Sazdanovic
Adam S. Sikora

n − moves

deformation

Montesinos–
Nakanishi
3–move
conjecture

skein modules of a product
of a surface and the interval

generating sets

Burnside groups

skein modules for lens spaces

Burnside group of links

(Y−B homology)

Quandles −− Quandle Homology

Yang−Baxter operators

Keis (involutive quandles)

Distributive
homology

Burnside Keis (invariant under n−moves)

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