

# Knots in Washington 51 April 4-6, 2025

*In memory of Roger Fenn and Colin Rourke*

Friday April 4 Fungler 220

TIME	TALK TITLE	SPEAKER	Remarks
<b>2:30 – 3:00</b>	<i>Coffee and snacks</i>		
<b>3:00 – 3:05</b>	Opening remarks	Jozef H. Przytycki	
<b>3:05 – 3:55</b>	<b>Universal Algebra and its Knot Theory applications</b>	<b>Ania Zamojska-Dzienio (Warsaw University of Technology)</b>	
<b>3:55– 4:15</b>	<i>Coffee Break</i>		
<b>4:15 – 4:35</b>	Relational Structures, Logical Limit Laws, and Layered Permutations	Matthew Kukla (GWU)	<b>Zoom Available</b>
<b>4:35-4:45</b>	<i>Coffee Break</i>		
<b>4:45-5:05</b>	Annular links and categorified invariants	Fraser Binns (Princeton University)	
<b>5:05-5:20</b>	<i>Coffee Break (and 1st conference Picture)</i>		
<b>5:20-6:00</b>	<b>Thompson's Groups, Annular Links, and Tangles</b>	<b>Louisa Liles (University of Virginia)</b>	<b>Distinguished Graduate Student Speaker</b>

# Saturday April 5 Phillips 111

TIME	TALK TITLE	SPEAKER	Remarks
<b>9:30 – 10:00</b>	<i>Breakfast</i>		
<b>10:00 – 10:50</b>	<b>A Seifert algorithm for integral homology spheres</b>	<b>William Menasco (University at Buffalo)</b>	
<b>10:50 – 11:10</b>	<i>Coffee Break</i>		
<b>11:10 – 11:30</b>	Topological Properties of null-geodesic refocusing and applications to $Z^x$ manifolds.	Friedrich Bauermeister (Dartmouth College)	
<b>11:30 – 11:40</b>	<i>Coffee Break</i>		
<b>11:40 – 12:00</b>	Quandle Quivers and Bridge Numbers	Puttipong Pongtanapaisan (Arizona State University)	
<b>12:00 – 2:00</b>	<b>LUNCH - Pizza Provided</b>		
<b>2:00 – 2:50</b>	<b>Configuration spaces of points and the mapping class groups of 4-manifolds</b>	<b>Boyu Zhang (University of Maryland)</b>	
<b>2:50 – 3:10</b>	<i>Coffee Break (and 2nd conference photo)</i>		
<b>3:10 – 3:30</b>	Diagrammatic Unknotting Number is NP-hard	Jaeyun Bae (Rutgers University–Newark)	
<b>3:30 – 3:40</b>	<i>Coffee Break</i>		
<b>3:40 – 4:30</b>	<b>Geometric structures and <math>PSL(2, \mathbb{C})</math>-representations of knot groups from knot diagrams</b>	<b>Anastasiia Tsvietkova (Rutgers University–Newark)</b>	
<b>4:30 – 4:50</b>	<i>Coffee Break</i>		
<b>4:50 – 5:10</b>	Dihedral solutions of the set-theoretical Yang-Baxter equation	Ania Zamojska-Dzienio (Warsaw University of Technology)	
<b>5:10 – 5:20</b>	<i>Coffee Break</i>		
<b>5:20 – 6:00</b>	<b>Low dimensional homology of Yang-Baxter operators yielding the HOMFLYPT polynomial</b>	<b>Ben Clingenpeel (GWU)</b>	<b>Distinguished Graduate Student Speaker</b>
<b>6:00 – 6:20</b>	<i>Coffee Break</i>		
<b>6:20 – 6:40</b>	TBA		
<b>~7:30 –</b>	<b>Conference Party!</b>		

## Sunday April 6 Phillips 111

TIME	TALK TITLE	SPEAKER	Remarks
<b>9:30 – 10:00</b>	<i>Breakfast</i>		
<b>10:00 – 10:50</b>	<b>SL(3) link homology for links and tangles</b>	<b>Mikhail Khovanov (Johns Hopkins University)</b>	<b>Zoom Available</b>
<b>10:50 – 11:10</b>	<i>Coffee Break</i>		
<b>11:10 – 11:30</b>	Irreducible components of two-row Springer fibers of classical type and Nakajima quiver varieties	Mee Seong Im (Johns Hopkins University)	<b>Zoom</b>
<b>11:30 – 11:40</b>	<i>Coffee Break</i>		
<b>11:40 – 12:00</b>	Homology Yang Baxter Operators Yielding HOMFLYPT	Jinseok Oh (KNU)	
<b>12:00-12:10</b>	<i>Coffee Break</i>		
<b>12:10-12:30</b>	Algebraic Curves and TQFTs	Catherine Lillja (Johns Hopkins University)	<b>Zoom Available</b>
<b>12:30 – 1:00</b>	<b>LUNCH - Pizza Provided</b>		
<b>1:00 – 1:50</b>	<b>Knot Logic and Arborescent Links</b>	<b>Louis H. Kauffman (UIC)</b>	<b>Zoom</b>
<b>1:50 – 2:10</b>	<i>Coffee Break</i>		
<b>2:10 – 2:30</b>	A range of the ranks of the set-theoretic Yang-Baxter homology of Alexander biquandles	Jinseok Oh (Kyungpook National University)	