Graduate Workshop on Topological Quantum Field Theory Talk Schedule

Events for:
Monday, September 14th - Friday, September 18th

Monday, September 14th

9:00am **Ingo Runkel - SCGP 102**

Title: Physical definition of a TQFT, axioms, examples in 2d

10:00am **Coffee**

10:30am **Ingo Runkel - SCGP 102**

Title: Physical definition of a TQFT, axioms, examples in 2d

11:30am **Short Break**

11:45am **Oleg Viro - SCGP 102**

Title: Spines of manifolds and TQFT's

12:45pm **Lunch**

2:15pm **Anton Kapustin - SCGP 102**

Title: Dijkgraaf-Witten theories. Equivariant TQFTs in 2d.

3:30pm **Tea Time**

4:00pm **Anton Kapustin - SCGP 102**

Title: Dijkgraaf-Witten theories. Equivariant TQFTs in 2d

Tuesday, September 15th

9:00am **Ingo Runkel - SCGP 102**

Title: Physical definition of a TQFT, axioms, examples in 2d

10:00am **Coffee**

10:30am **Anton Kapustin - SCGP 102**

Title: Dijkgraaf-Witten theories. Equivariant TQFTs in 2d.

11:30am **Lunch**

1:00pm **SCGP Weekly Talk - Zhenghan Wang - SCGP 102**

Title: Realization of TQFTs in Nature and topological quantum computation

Abstract: Topological quantum computation is based on the possibility of realization of TQFTs in Nature as topological phases of matter. It is very difficult to classify topological phases of matter theoretically, and find non-abelian objects in Nature. This talk is an introduction to the subject for a general audience.

2:15pm **Sasha Kirillov - SCGP 102**

Title: 3d TQFTs; modular functor; Reshetikhin-Turaev

3:30pm **Tea Time**

Wednesday, September 16th

9:30am **Zhenghan Wang - SCGP 102**

Title: Realization of TQFTs as Topological Phases of Matter and Applications

10:30am **Coffee**

11:00am **Sasha Kirillov - SCGP 102**

Title: 3d TQFT and modular functor

12:00pm **Lunch**

2:15pm **Victor Ostrik - SCGP 102**

Title: modular tensor categories

Abstract: This series of talks will be devoted to the theory of modular tensor categories which serve as an input required to construct 3d TQFT. We will discuss examples and constructions of such categories, as well as structure theory and classification results.

3:30pm **Tea Time**

4:00pm **Sasha Kirillov - SCGP 102**

Title: 3d TQFT and modular functor

Thursday, September 17th

9:30am **Victor Ostrik - SCGP 102**

Title: modular tensor categories

Abstract: This series of talks will be devoted to the theory of modular tensor categories which serve as an input required to construct 3d TQFT. We will discuss examples and constructions of such categories, as well as structure theory and classification results.

10:30am **Coffee**

11:00am **Victor Ostrik - SCGP 102**

Title: modular tensor categories

Abstract: This series of talks will be devoted to the theory of modular tensor categories which serve as an input required to construct 3d TQFT. We will discuss examples and constructions of such categories, as well as structure theory and classification results.

12:00pm **Lunch**

2:15pm **Zhenghan Wang - SCGP 102**

Title: Realization of TQFTs as Topological Phases of Matter and Applications

3:30pm **Tea Time**

4:00pm **Mikhail Khovanov - SCGP 102**

Title: Introduction to link homology Part I

Friday, September 18th

9:30am **Dmitri Nikshych - SCGP 102**

Title: modular tensor categories

10:30am **Coffee**

11:00am **Mikhail Khovanov - SCGP 102**

Title: Introduction to link homology Part II

12:00pm **Lunch**

2:15pm **Dmitri Nikshych - SCGP 102**

Title: modular tensor categories

3:30pm **Tea Time**