

Algebra Seminar Reading Group on Tensor Categories
Fall 2019, Fridays 2:00p - 4:00p, 347 Altgeld

Date and Time Talks are 45 minutes unless stated otherwise	Speaker	Topic	Materials [TV] = Tureav-Virelizier's text on "Monoidal Categories" (primary) [EGNO] = Etingof et. al.'s text on "Tensor Categories" (secondary)
Sept 6 at 2:00pm	Chelsea Walton	Brief overview discussion during organizational meeting Category Theory Terminology - <i>read on own</i> ; see materials	Overview of terms that we'll discuss: https://faculty.math.illinois.edu/~notlaw/MonoidalCategories-CheatSheet-20191010.PDF Background material on Basic Category Theory Terminology: [TV] = Section 1.1 T-D Bradley = Categories [1] [2] , Functors [1] [2] , Nat'l Transf's [1] [2]
Sept 13 at 2:00pm	Jesse Huang	Monoidal Categories	[TV] = Sections 1.2 and 1.3 [EGNO] = Sections 2.1, 2.2, 2.3 CW's Math 506 notes - 20181211 - pages 3-5
Sept 13 at ~3:00pm	Tutomu Okano	Monoidal Functors	[TV] = Sections 1.4 and 1.5 [EGNO] = Sections 2.4, 2.5, 2.6 [Speaker notes]
Sept 27 at 2:00pm	Anh-Tuong Nguyen	Rigid and Pivotal monoidal categories and functors	[TV] = Sections 1.6 and 1.7 [EGNO] = Section 2.10, part of Section 4.7
Sept 27 at ~3:00pm (two ~20 minute talks)	Bingyan Liu & Saaber Pourmotabbed	Graphical calculus	<Contrary to [TV], let's use top-to-bottom diagram convention> [TV] = Sections 2.1, 2.3.1, 2.5.1 [EGNO] = Section 2.10, part of Section 4.7
Oct 4 at 2:00pm	Anh-Tuong Nguyen	Traces, Dimensions, and Spherical monoidal categories	[TV] = Sections 2.6 and 2.7 [EGNO] = Section 4.7
Oct 4 at ~3:00pm	Mingyan Simon Lin	Braided monoidal categories	[TV] = Sections 3.1 and 3.2 [EGNO] = Sections 8.1, 8.2
Oct 11 at 2:00pm	Eric Samperton	Ribbon monoidal categories	[TV] = Section 3.3 [EGNO] = Section 8.10
Oct 11 at ~3:00pm (two ~20 minute talks)	Johnson Tan	Monoidal linear categories and Non-degeneracy	[TV] = Sections 4.1, 4.2, and 4.3
Nov 15 at 2:00pm	Hongdi Huang	Fusion and Modular categories	[TV] = Sections 4.4 and 4.5 [EGNO] = part of Sections 4.8, 8.14, 8.19, and 8.20
Nov 15 at ~3:00pm	Harshit Yadav	Center of a monoidal category	[TV] = Chapter 5 [EGNO] = Section 8.5, part of Section 8.20
Dec 6 at 2:00pm	Hongdi Huang	Algebras, Coalgebras, Bialgebras, Co/Mod categories	<Contrary to [TV], let's use top-to-bottom diagram convention> [TV] = Section 6.1 [EGNO] = Section 7.8
Dec 6 at ~3:00pm	Harshit Yadav	Bialgebras, Hopf algebras, and reconstruction theory	<Contrary to [TV], let's use top-to-bottom diagram convention> [TV] = Section 6.2 [EGNO] = Sections 5.2 and 5.3 (esp. Theorems 5.2.3 and 5.3.12)
Dec 13 at 2:00pm	Chelsea Walton	Coends	<Contrary to [TV], let's use top-to-bottom diagram convention> [TV] = Sections 6.4 - 6.6
Dec 13 at ~3:00pm	Chelsea Walton	Modularity re-examined, Closing Summary	[TV] = Section 6.7 [EGNO] = part of Sections 8.14 - 8.20