Topology Advanced Class — Michaelmas 2025
The Even Filtration.

Schedule

Date	Speaker	Title
13/10	Sofía Marlasca Aparicio	Intro: The Adams–Novikov filtration and prismatic cohomology
20/10	Sam Moore	On the cohomology of schemes
27/10	Glen Lim	Hochschild Homology
03/11	Josep Fontana McNally	Topological Hochschild Homology
10/11	Max Blans	The BMS filtration and prismatic cohomology
17/11	Naomi Rosenberg	The even filtration
24/11	Sam Moore	Cyclotomic bases and Wilson spaces
01/12	Sofía Marlasca Aparicio	Comparison Theorems for the Even Filtration

References

Talk 1:
- D. C. Ravenel, *Complex Cobordism and Stable Homotopy Groups of Spheres.*
- B. Bhatt, P. Scholze, *Prisms and prismatic cohomology.*
- J. Hahn, A. Raksit, D. Wilson, *A motivic filtration on the topological cyclic homology of commutative ring spectra.*

Talk 2:
- The Stacks Project, Chapters 30, 50, 59, 60.
- J. S. Milne, *Lectures on étale cohomology.*

Talk 3:
- J.-L. Loday, *Cyclic Homology.*
- B. Keller, *Hochschild (co)homology and derived categories.*
- C. Weibel, *An Introduction to Homological Algebra.*

Talk 4:
- M. Bökstedt, *Topological Hochschild homology.*
- B. Dundas, T. Goodwillie, R. McCarthy, *The local structure of algebraic K-theory.*
- A. Krause, T. Nikolaus, *Lectures on THH and TC.*
- T. Nikolaus, P. Scholze, *On topological cyclic homology.*

Talk 5:
- B. Bhatt, M. Morrow, P. Scholze, *Topological Hochschild homology and integral p-adic Hodge theory.*
- B. Bhatt, M. Morrow, P. Scholze, *Integral p-adic Hodge theory.*
- B. Bhatt, P. Scholze, *Prisms and prismatic cohomology.*

Talk 6:
- J. Hahn, A. Raksit, D. Wilson, *A motivic filtration on the topological cyclic homology of commutative ring spectra.*
- J. Rognes, *The Hahn–Raksit–Wilson Even Filtration* (expository notes).
- P. Pstrągowski, *Perfect even modules and the even filtration.*

Talk 7:
- J. Hahn, A. Raksit, D. Wilson, *A motivic filtration on the topological cyclic homology of commutative ring spectra.*
- T. Nikolaus, P. Scholze, *On topological cyclic homology.*

Talk 8:
- J. Hahn, A. Raksit, D. Wilson, *A motivic filtration on the topological cyclic homology of commutative ring spectra.*
- B. Bhatt, P. Scholze, *Prisms and prismatic cohomology.*

General reference: Notes from Talbot workshop 2024.