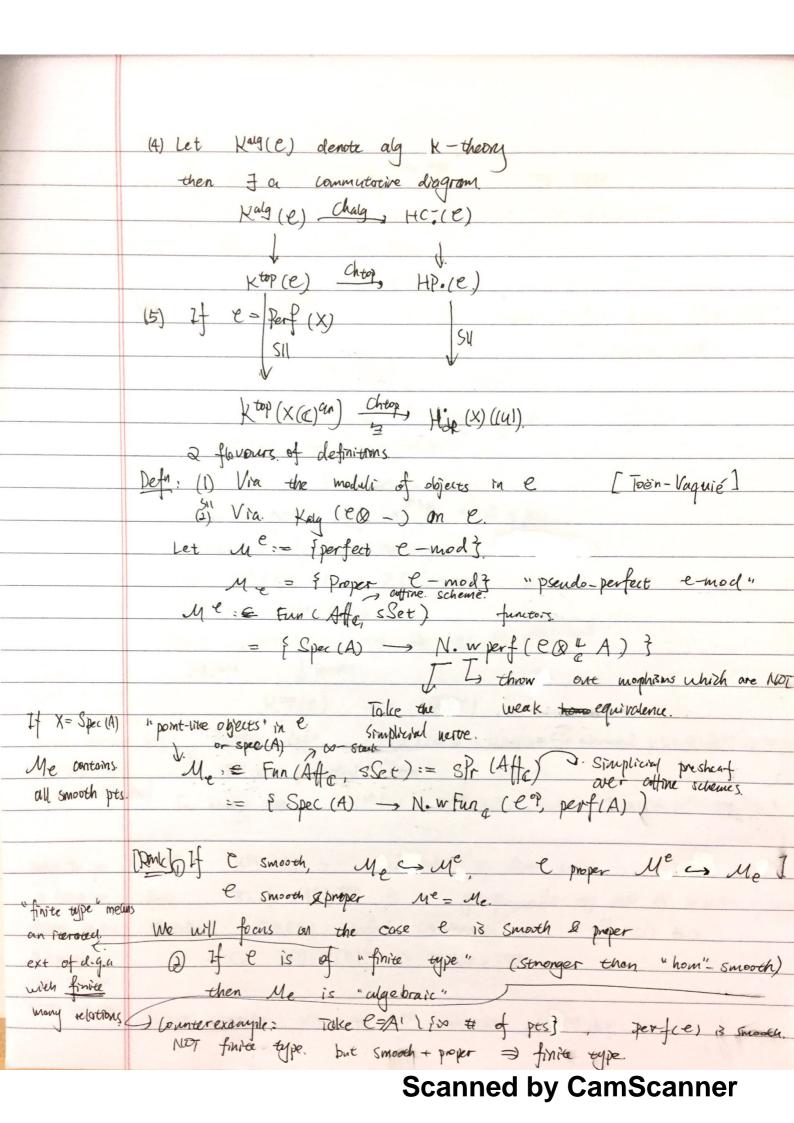
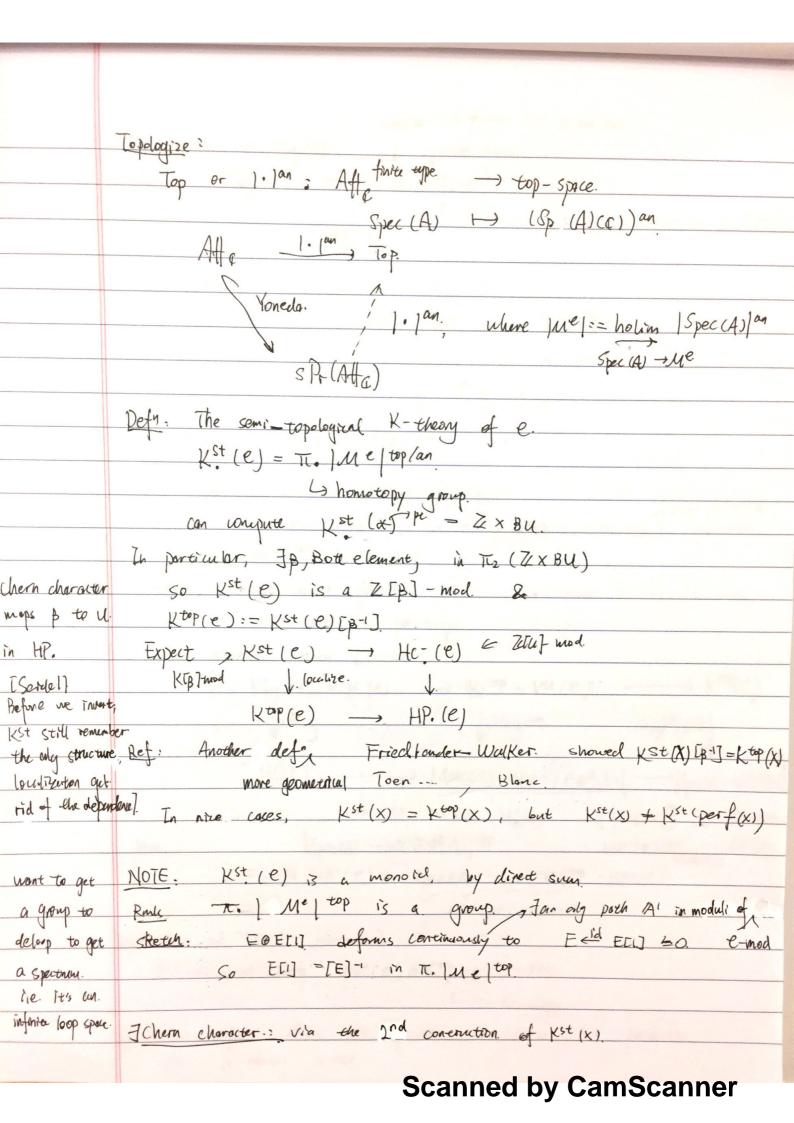
Top K-theory of da-categories Ret: A-Blanc "Top K-theory nc-spaces..." · summary in Kaledin's 2010 PICM · short sketch in KKP · Toen's Lecture in Miani 2010 on Aurany's webpoge Hip (x) 3 Hiseu (X) = H'(X, C) = H; = H'(X,Z)/tors. Want: nc-origin of Hz., integral Lattice. NOTE: For various masons, its been suggested that one should instead use the commensurable, in (ch: Ktop(Xan) - Ho (X). iso often & Q for La-model, (X,f) f: X ~C. Har (x, f) 2 = H. (Six, d+z-df) (see Intoni) HB (X, f) = H. (X, Re [W/2 <0]; C)  $H^{Z} = H \cdot (X, Re \{W \mid Z \mid co\}; Z)$ Vertically, they are the same.

Supposed to use  $K^{top}(X, Re \{w \mid z \mid o\}) \neq W$ Q: How to get ktop (xan) from perf (x) = e.? Ponk: High (X) ((U)) 5 HP'(e). category of spectras

Thm [Blanc] I functors Ktop: dgcat Spectras Satisfying (1) Ltop (QC) = BUXZ = Ktp(x) Pt we will talk (2) If X separated, finite type, then Ktop (perf(x)) = Ktop (X(C) an) (3) M invariance, warmeres by fittered colinits [tremmon can apply to loh (x) affine how hom (x, Y) is inf doub over []

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uneroe" (simplicial bar constructions) &2 Relation to Kalq(e) , weak equiv Recall: Kalg (e) = T. D N. W.G. e L Ske = "K-sup fileration in Perf(e)4 3 notural map Kolg(e) -> HC.(e) Ref. [Comes, Karonbi; Goodwillie, Hood-Jones, Jones] Blanc: Bu presheaf of alg X-theories, as a functor, it's K: Spec (A) - Kay ( & & A) then Kst (e) = |K(c) |top e.g. aidaz daz > (a, co a, da a, a, a, a, a, a, a) fiterotion induces Me top 5 1K (e) 6 b/c any non-trival fiteration admits a contenuous (or A'-) havotopy to the enrula one cas previously Fun inherited Chern Character  $K_{alg}(e) = K(e) \rightarrow |K|^{top} = K^{se}(e) \longrightarrow K^{top}(e)$ Chalge to P. (chalge to P. (chalge to P.) HC(e) -> |Spec(A) ->HC- (e&#A) | -> |Spec(A) -> HP (ebA) want to call it Hisle) [Kassel] SI Kinnech Spec(A) -> HP·(eou A) top HP·(e) & HP·(A) Also, 7 HP.(6) @ [Spec(4) -> HD.(A)] tob = HD.(6) HP\* (pe) = ktu=1] Ref: Intens on TERP. semeture.] Janc-pend map HP'(e) & Keep (e) -> 1K. 1 K-homology Aside: Derived aquiv closs NOT. preserve 7- Latere, but preserve the K-theory latere.

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