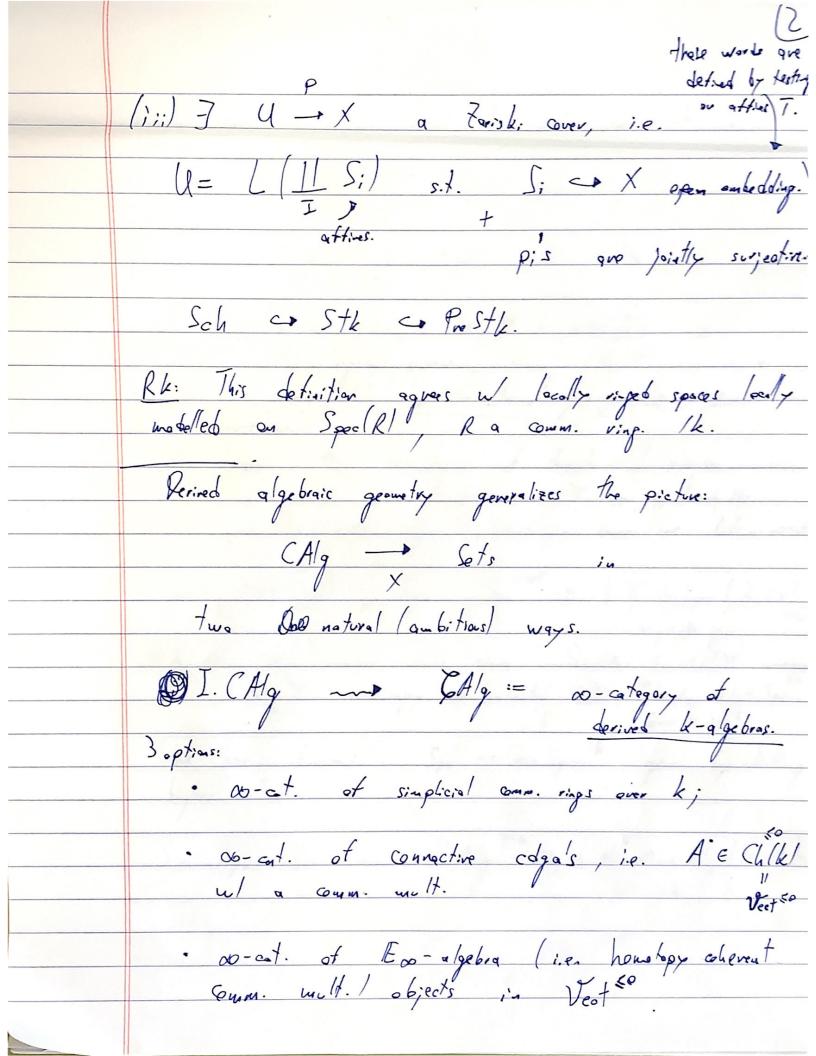
	//
	DAG Seminar.
	Lecture 1- 6/9/2021.
-	
	1) What is devived algebraic geometry?
	Recall Grother diech's point of view: given a scheme X one has a function:
	hx: (Sch " - Sets.
	$h_X: (S_{ch}^{aft})^{op} \longrightarrow S_{ets}.$ $S \longrightarrow Mags (S, X).$
	Moreover, we can indenstand Sch the cat. of solves
	Mereover, we can indenstand Sch the cat. of solves as objects in Prostk := Fin ((Sch of) op, Sets)
	w/ some conditions.
	Indeed, (Schaff) = CA/q, (I will drop k, a
	Indeed, (Sch att) of = CAlq (I will drop k, a fixed field.) has many topologies (Zariski, etale,
	One has Stk - Prestk the subcat. of
	flat). One has Stk - Prestk the subcat. of F: CAlg - Sets that are (say) that sheaves. etale. One has L: Prestk - Stk a left adjoint to
	One has L: Prestk -> Stk a left adjoint to
	One has L: Prestk - stk a left adjoint to The inclusion - sheatitication toter.)
	Let'n: A Schowe. is an object \$\mathbb{D} \times \text{Enostle}\$ Sakis kying: (i) \times is an etale sheat; (ii) \times
	Substying: (i) X is an étale sheaf;
	(ii) X -> X x X is reprocedable, i.e.
	V S-1x, SESOLOFF Xx S' is affine.



RKI: We will talk about these models were later or. Bk An or category b (we will spond some time on this) is - collection of objects X EOb16/; topological space. How (X, Y), only
wearing tol up to houstopy. Iteletis

II. Sets ~ Spc. Ex: Spc the or-category of topological spaces , where $x \approx y$, wherever y is contractible.

[we will construct Spc precisely once we define original spaces of the social Sets of Spc, by Spc := } X = Spc | h; (X) = 0

With the Mass maker sence, since h; (X) = i; (Y) where X ~ hometopy equivalent! DDD (levely, &ts = Spc . Grad = Spc !.

One has functors Spc -> see Spc given by killing higher cells. Similarly, one has &Alg := } A' & CAlg /H'(A')=0 and maps EAlg - EAlg.

Notice: EAlg ~ CAlg.

· [X/6] is an De algebraic stack (Deligne-Ha · He is a hipher lalgebraic) stack (Simpson) Revived schoos: Soh as Stk co Pasth.

given by natural generalization of the conditions: (i), (ii) & (iii)