

17:31:43 From Tom Gannon : For conjecture (3), is there an obvious translation of the action of the Whittaker Hecke category on $\text{Whit}(\text{D-Mod}(\text{GL}_n(K)))$?

17:32:03 From Will Sawin : You mention how the decategorification of conjecture (3) gives a classical fact, the Kirillov model. It seems to me like there are a lot of decategorifications of the conjectures that you could right down. Are they all classically known facts?

17:33:33 From Dmitry Gourevitch to Andre Reznikov(Privately) : I stopped the recording. Let's resume it after the break

17:33:47 From Alexander Braverman : About the decategorification: I am not actually sure if there is one for Conj. 1 for example. It should be describing the full Hecke algebra of $\text{GL}(n)$ on the Galois side

17:33:56 From Alexander Braverman : I don't know if such a thing is possible

17:34:47 From Alexander Braverman : To Tom Gannon: what do you mean by Whittaker Hecke category?

17:34:52 From Will Sawin : Well one could interpret Conjecture 1 as saying that the full Hecke algebra is at least morally the sum over representations of π tensor π -dual where π looks like functions on the fiber of W_n over that local system

17:35:14 From Will Sawin : So one would focus on interpreting Conjecture 3 for the fibers

17:35:57 From Tony Feng : In the discussion of categorical Tate's thesis for GL_1 , you mentioned that it is **not** true that a section of a non-trivial rank 1 local system is necessarily 0. In the discussion of the categorical Kirillov model, you mentioned that a map from rank 1 local system to irreducible rank 2 local system must be 0. These seem like similar situations; why is there the subtlety in one case but not the other?

17:36:12 From Alexander Braverman : Even in that case I don't know the formulation. Maybe you can do it, but it is not obvious to me (the problem is that de Rham local systems behave differently in families from Galois representations)

17:36:25 From Tom Gannon : By Whittaker Hecke category, I mean that $\text{D-Mod}(\text{GL}_n(K))$ has an action of $\text{GL}_n(K)$ times $\text{GL}_n(K)$ and taking Whit with respect to this action.

17:37:03 From Alexander Braverman : To Tony Feng: the point is that the statement is true fiberwise but not in families (if you allows the rank 1 local system to vary)

17:38:16 From Lin Chen : Would conjecture 1 predicts that Arinkin's local conjecture would sends $\text{Dmod}(\text{GL}(n,K))$ to some version of $\text{IndCoh}(W_n)$ as a (version of) sheaf of category of LS?

17:39:49 From Alexander Braverman : I.e. if you consider the map from, Y to LS_1 , where Y consists of rank 1 local system + flat section, then the fiber of this over any non-trivial local system is just $\text{Spec}(C)$ (i.e. point) but if you restrict this morphism to the complement of the trivial local system than overall it is not an isomorphism (quite amusingly it is an isomorphism on level of R -points where R is a Noetherian ring, but if it is not Noetherian, then R -points are different)

17:39:56 From Alexander Braverman : This was discovered by Sam Raskin

17:40:39 From Alexander Braverman : Arinkin defines some 2-category which is a modification of the 2-category of categories living over LS