16:15:55 From Loren Spice : Works fine.

16:25:58 From Dmitry Gourevitch : Link to slides, just in case:

http://www.weizmann.ac.il/math/RTAA/sites/math.HWRT/files/uploads/2020bernstein-handout.pdf

17:10:21 From Spencer Leslie : Which paper was that referring to?

17:13:04 From Sol Friedberg : "On the Nonnegativity of  $L(1/2,\pi)$  for SO(2n+1)". Annals of Mathematics. 157 (3): 891–917. 2003

17:16:46 From Alexander Braverman : Is it only for homogeneous spaces?

17:17:01 From Spencer Leslie : Thank you!

17:17:27 From David BenZvi : No, let's take X smooth affine for now but not necessarily homogeneous

17:18:04 From Alexander Braverman : But only for smooth, right? I mean before Yiannis was also

choosing an embedding of X into something affine - it was an additional choice

17:18:41 From David BenZvi : Yes that's correct

17:19:10 From Alexander Braverman : Do you have a more general conjectural which will also take the above embedding into account?

17:19:16 From Alexander Braverman : conjecure

17:19:31 From Jonathan Wang : But the right hand side does make sense for non-smooth X in terms of just  $V_X/G_X^{o}$  if you're not looking for something Hamiltonian

17:19:57 From akshay : I will say a little about non-smooth X in my talk

17:20:26 From Alexander Braverman : Well, sometimes you even start with something smooth (e.g. the group) but then embed it into something else (e.g. some semigroup). That case is not covered by the conjecture, right?

17:21:35 From akshay : The conjecture works well for toric varieties, at least. I haven't thought about group compactifications besides that case.

17:21:59 From akshay : That is the dual V\_X depends on the embedding.

17:22:00 From Jonathan Wang : I don't know about a precise conjecture but I think the numerics suggest you can consider the loop space of the embedding X on the left (and V\_X depends on the embedding)?

17:22:13 From Alexander Braverman : You mean, the equivalence of categories conjecture? Is it possible to formulate it for toric varieties?

17:23:09 From Dennis Gaitsgory : Can somebody explain the relation between the M-conjecture and Plancherel?

17:23:14 From akshay : I believe it is very close to the type of conjecture you discussed in your talk (although your conjecture llows ramification, whereas the conjecture Yiannis mentioned was only the ulnramified case )

17:23:59 From Alexander Braverman : I would be very glad to understand this...

17:24:02 From akshay : Dennis, if you compute all the Homs between sheaves on X(F)/G(O), and take Frobenius, you get a recipe for all inner products, which gives you Plancherel.

17:24:05 From bezrukav : Akshay, just to make clear "you" meant Sasha, not Dennis? :)

17:24:11 From akshay : Sorry, "you" was Sasha!

17:24:52 From Alexander Braverman : And my previous message was a reply to Akshay's statement that the toric is related to my talk (I am probably missing something obvious...)

17:25:05 From Tony Feng : What does the existence of a [distinguished?] Hamiltonian structure on M<sup>^</sup> mean in terms of V\_X<sup>^</sup>? i.e. why does the recipe M<sup>^</sup> = V\_X<sup>^</sup> x\_{G\_X^} G<sup>^</sup> produce a hamiltonian space? 17:25:16 From Yakov Varshavsky : Akshay: in the inner form formula, there is Verdier duality. Does it really exist?

17:26:26 From akshay : Yakov, for X smooth affine I don't think there is a problem. I don't know about other cases. Tony, the Hamiltonian structure is not obvious in this description - we construct it by hand (under some conditions).

17:27:08 From akshay : (Yakov, I am not an expert on that point, I would be happy to talk more.) 17:27:45 From David BenZvi : Tony - you can also give an alternative definition of V\_X from the automorphic side where the Hamiltonian structure is evident

17:29:54 From bezrukav : David, if you heard my question, can you maybe comment please?

17:29:58 From David BenZvi : @Roman - I think this conjecture should be related to the "Matsuki dual" form of the real conjecture Nadler and I formulate

17:30:14 From bezrukav : yes, that's what I had in mind

17:32:18 From David BenZvi : I think it should be essentially the same conjecture in the case of symmetric spaces but not sure I want to commit to that

17:36:33 From Alexander Braverman : To David: Is the factorizable conjecture considerably more difficult than just the local one?

17:37:37 From David BenZvi : Yes, it's a lot more structure, even in the Satake case the factorizable form is not really documented! In general it's hard even to formulate

17:38:06 From David BenZvi : (It requires extra structure on the dual space)

17:38:45 From Alexander Braverman : I will be glad to discuss this further