

Department of Mathematics The Chinese University of Hong Kong



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Representation and Number Theory Seminar

Observe *LG* via *Gr_G* and collision of disks

by

Dr. Lin CHEN Institute for Advanced Study

<u>Abstract</u>

Given a DG category acted by the loop group LG, one can define a factorization $D(Gr_G)$ -module category, where Gr_G is the Beilinson– Drinfeld affine Grassmannian, viewed as a factorization indscheme. We will show this construction loses no information: it gives a fully faithful 2-functor from LG-mod(DGCat) to $Gr_G-mod_{fact}(DGCat)$. We will also explain the role of this result in the local Geometric Langlands program. This is a report of the incoming joint work of Dennis Gaitsgory, Yuchen Fu, David Yang and the speaker.

Date	: 11 May, 2023 (Thursday)	
Time	: 1:30pm – 2:30pm	
Venue	: Room 502A, Academic Building I	
	The Chinese University of Hong Kong	B

All are Welcome