

Spring 2019

Singular BGG complexes over isotropic

2- Grassmannian - Denis Huseadžić

Completed Hopf algebras over $\mathcal{U}(\mathfrak{g})$
of formal diffeomorphisms on a Lie group G
- Martina Stojic

$\mathcal{U}(\mathfrak{g}^L)$ Hopf alg, $\hat{x}_1, \dots, \hat{x}_n$ non-comm, "coordinates"

$\hat{S}(\mathfrak{g}^*) \rightarrow$ as algebra $k[[\hat{x}_1, \dots, \hat{x}_n]]$

\rightarrow as coalgebra, "dual to $\mathcal{U}(\mathfrak{g}^L)$;

- needs completion $\hat{\otimes}$

- so we have a problem with the action

$\hat{S}(\mathfrak{g}^*) \hat{\otimes} \mathcal{U}(\mathfrak{g}^L)$ since (putting $L = \mathcal{U}(\mathfrak{g}^L)$, $H = L^V$)

$$(H \hat{\otimes} H) \hat{\otimes} L \rightarrow H \hat{\otimes} L \rightarrow L$$

\uparrow $\hat{\otimes}$

$$H \hat{\otimes} (H \hat{\otimes} L) \rightarrow H \hat{\otimes} L \rightarrow L$$

$$\text{Diff}^\omega(G, e) \simeq J^\infty(G, e) \# \mathcal{U}(\mathfrak{g}^L)$$

Localisation approach to n.c. flag variety

- Zoran Škoda

- n.c. approach \rightarrow space $\xrightarrow{\text{duality}}$ "objects" on space

Tangent lift of Poisson structures - Karolina Wojciechowska

G_n C^* -algebras, dynamical systems
and classifications - Karen Strung