

$$\sim$$

$$q: \Lambda \longrightarrow \overline{Q}_e^{\#}(-1)$$

$\downarrow$
 gerbes

$$\text{Whit}_q(F|_G) \subseteq \text{Sh}_q(F|_G)$$

$$q \longmapsto \mathcal{S}_q^{\text{lus}} \text{ - factorization}$$

algebra on Conf

Thm (Yang)

$$F: \text{Whit}_q(F|_G) \xrightarrow{\sim} \mathcal{S}_q^{\text{lus}}\text{-mod}^{\text{Fact}}$$

$$\text{Conf} = \bigcup_{\lambda \in \Lambda^{\text{res}} - 0} \text{Conf}^{\lambda}$$

$$\text{Conf}^{\lambda} - \Delta_X \hookrightarrow \text{Conf}^{\lambda}$$

$$1) \lambda \neq w(p) - p, \quad w \in W: \ell(w) = 2$$

applies $\begin{Bmatrix} 1 \\ 2 \end{Bmatrix}$ to $H^0(j!)$

$$2) \lambda = w(p) - p, \quad \ell(w) = 2$$

$j! \neq$

$$\Sigma_1^{DK} = \text{ID}(\Sigma_{1^{+1}}^{L_1})$$

$$\mathcal{G} |_{G_{\text{nf}}^{\text{dc}}} \text{ trivial}$$

$$(\Sigma_1^{L_1})^{-\text{dc}} = \omega_*[-1]$$

$$G|_{G_{\text{nf}}}$$

$$\downarrow \pi$$

$$G_{\text{nf}}$$

$$F|_{G_{\text{nf}} \otimes X}$$

$$\downarrow \pi$$

$$G_{\text{nf}} \otimes X$$

$$F: \text{Whit}_q(F|_G) \longrightarrow \Sigma_q^{L_1} \text{rel}^{\text{Fact}}$$

$$J_! (\mathcal{F}) := \mathcal{I}_! (\mathcal{F} \otimes \Delta_!^{\frac{\infty}{2}})$$

$$J_* (\mathcal{F}) := \mathcal{I}_* (\mathcal{F} \otimes \nabla_!^{\frac{\infty}{2}})$$

$$J_{! \otimes} (\mathcal{F}) := \mathcal{I}_{! \otimes} (\mathcal{F} \otimes \mathcal{IC}_!^{\frac{\infty}{2}})$$

$$\mathcal{F} \in \text{Whit}_! (Fl_G)$$

$$\downarrow$$

$$\text{Whit}_! (Fl_{G_{\text{ant}} \times X})$$

$$Gr_{G_{\text{ant}}}$$

$$t^\lambda$$

$$\uparrow s.$$

$$\uparrow$$

$$Gr_f$$

$$\lambda \cdot x$$

$$\mathbb{Z} N_{G_{\text{ant}}}$$

$$S_{G_{\text{ant}}}^- \xrightarrow{i_{G_{\text{ant}}}^-} Gr_{G_{\text{ant}}}$$

$$\Delta_!^{\frac{\infty}{2}} = (i_{G_{\text{ant}}}^-)_! (\omega_{G_{\text{ant}}})$$

$$\nabla_i^{\overline{2}} = (\quad)_*$$

$$N(k) t^\lambda = u_k \text{ the orbit}$$

$$\lambda x \xrightarrow{i_\lambda} G_{\infty x}$$

$$(i_\lambda)_! J_!(\mathcal{F}) = H(F|_E, \mathcal{F} \otimes i_\lambda^!(\omega))$$

$$\parallel N(k) t^\lambda \xrightarrow{i_\lambda^{-1}} F|_E$$

$$H\Omega H(\Delta_\lambda^{\text{whit}}, \mathcal{F})$$

$$\Delta_\lambda^{\text{whit}} = A_{j,!}^{N(\lambda),X}(BMW_\lambda)$$

$$\lambda\text{-derived} \quad BMW_\lambda = j_{\lambda,!}$$

$$\underline{\text{Thm}} \quad J_!(\text{unit}^{\text{whit}}) = \sum \varphi^{\text{inv}}$$

$$J_*(\text{unit}^{\text{whit}}) = \Sigma_1^{\text{or}}$$

$$J_*(\text{Whit}^{\text{whit}}) = \Sigma_1^{\text{sm}}$$

$$F: \text{Whit}_q(F|c) \rightarrow \Sigma_1^{\text{us-whit}}^{\text{Fact}}$$

$$\Delta_\lambda^{\text{whit}} \in \text{Whit}_q(F|c)$$

$$\Delta_\lambda^{\text{Fact}} \in \Sigma_1^{\text{us-whit}}^{\text{Fact}}$$

$$\text{Fon}(\Delta_\lambda^{\text{Fact}}, \mathbb{F}) = i_{\lambda*}!(\mathbb{F})$$

$$2(\lambda \times \gamma) \times \text{Cat}(X \times X) \xrightarrow{j_{\lambda \times}} \text{Conf}_{\sigma, X}$$

$$\Delta_\lambda^{\text{Fact}} = j_{\lambda*}!(\in \boxtimes \Sigma_1^{\text{us}})$$

$$\underline{\text{Then}} \quad \Delta_\lambda^{\text{Fact}} \xrightarrow{\sim} F(\Delta_\lambda^{\text{whit}})$$

$$(i_{\lambda*})! \cdot J_!(\mathbb{F}) := \cap$$

..., ..., ...



$$(c_{\mu x})^* J_! (\Delta_{\lambda}^{\text{Whit}}) = 0$$

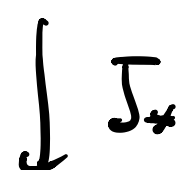
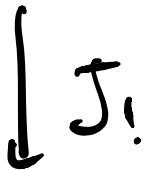
for $\mu \neq \lambda$.

$$\text{ID} : \text{Whit}_q(F\ell) \rightarrow \text{Whit}_{q'}(F\ell)$$

$$\text{ID}(A_{V_!}^{\text{rel}, x}(\mathcal{F})) = A_{x, \text{rel}}^{\text{rel}, \mathcal{F}}(\text{ID}(\mathcal{F}))$$

Then (Yang)

$$\text{Whit}_q(F\ell) \xrightarrow{\text{ID}} \text{Whit}_{q'}(F\ell)$$



$$\text{shv}_q(\text{Gr}t) \xrightarrow{\text{ID}} \text{shv}_{q'}(\text{Gr}t)$$



$$J_! (\Delta_{\lambda}^{\text{Fact}}) = \Delta_{\lambda}^{\text{Fact}}$$

$$\begin{array}{c} \text{Whit}_1(G_{\mathbb{C}}) \\ \uparrow \pi \\ \text{Whit}(\overline{Bun_N}, \infty, x) \end{array}$$

$$\begin{array}{ccc} J_! \cdot \pi^! : \text{Whit}_{\text{res}} & \longrightarrow & \text{Conf} \\ \downarrow & & \downarrow \pi \\ \overline{Bun_N} & \xrightarrow{q} & (\overline{Bun_{N, \infty, x}} \times_{\overline{Bun_{\mathbb{C}}}} \overline{Bun_0})^{\circ} = \overline{Z} \\ & \swarrow & \downarrow \\ & & \text{Conf} \end{array}$$

$$\pi_* \left(\bigoplus_{\overline{Bun_{\mathbb{C}}}} j_! (e_{\overline{Bun_0}}) \right).$$