WINTER LOCAL LANGLANDS Wh-5

ABSTRACT. Literally what was written on the boards, and nothing else.

$$\begin{array}{ccc} \mathbf{KL}(G)_{-\kappa} & FLE_G & \mathbf{Whit}_{-\check{\kappa}}(\mathbf{Gr}_{\check{G}}) \\ \downarrow{\scriptstyle j_!^{KM,Lus}} & & \downarrow{\scriptstyle j_!^{Whit,Lus}} \\ \mathbf{KL}(T)_{-\kappa} & \xrightarrow{FLE_T} & \mathbf{Whit}_{-\check{\kappa}}(\mathbf{Gr}_{\check{T}}) \end{array}$$

$$\begin{array}{ccc} \mathbf{KL}(G)_{-\kappa} & FLE_G & \mathbf{Whit}_{-\check{\kappa}}(\mathbf{Gr}_{\check{G}}) \\ \downarrow{\scriptstyle j_!^{KM}}\downarrow{\scriptstyle j_{!*}^{KM}} & & \downarrow{\scriptstyle j_!^{Whit}}\downarrow{\scriptstyle j_{!*}^{Whit}} \\ \mathbf{KL}(T)_{-\kappa} & \xrightarrow{FLE_T} & \mathbf{Whit}_{-\check{\kappa}}(\mathbf{Gr}_{\check{T}}) \end{array}$$

$$\begin{array}{ccc} \mathbf{KL}(G)_{\kappa} & F\tilde{L}E_G & \mathbf{Whit}_{\check{\kappa}}(\mathbf{Gr}_{\check{G}}) \\ \downarrow{\scriptstyle j_!^{KM}}\downarrow{\scriptstyle j_{!*}^{KM}} & & \downarrow{\scriptstyle j_!^{Whit}}\downarrow{\scriptstyle j_{!*}^{Whit}} \\ \mathbf{KL}(T)_{\kappa} & \xrightarrow{F\tilde{L}E_T} & \mathbf{Whit}_{\check{\kappa}}(\mathbf{Gr}_{\check{T}}) \end{array}$$

$$\begin{array}{ccccc} j^{KM}_{\{!,!*\}} : \hat{\mathfrak{g}} - \mathbf{Mod}_{\kappa}^{\mathfrak{L}\mathfrak{G}^+} & \overset{\phi_!}{\underset{\phi_{!*}}{\rightrightarrows}} & (\hat{\mathfrak{g}} - \mathbf{Mod}_{\kappa})_{\mathfrak{L}(\mathfrak{N}^-)\mathfrak{L}\mathfrak{T}^+} & \xrightarrow{C_*} & (\hat{\mathfrak{t}} - \mathbf{Mod}_{\kappa})_{\mathfrak{L}\mathfrak{T}^+} \\ \| & & & & \| \\ \mathbf{KL}(G)_{\kappa} & & & & \mathbf{KL}(T)_{\kappa} \end{array}$$

$$\mathbf{Dmod}(\mathbf{Gr}_G)_{\mathfrak{L}(\mathfrak{N}^-)\mathfrak{L}\mathfrak{T}^+} \xrightarrow{\sim} \mathbf{Dmod}(\mathbf{Gr}_G)^{\mathfrak{L}\mathfrak{N}\mathfrak{L}\mathfrak{T}^+}.$$

$$S^0_{Ran} \xhookrightarrow{j} \overline{S^0_{Ran}}$$

$$j_!(\omega_{S^0_{Ran}}) \qquad \mathbf{IC}^{\frac{\infty}{2}}$$

$$\begin{array}{ccc} \mathbf{Dmod}(\mathbf{Gr}_G)_{\mathfrak{L}(\mathfrak{N}^-)\mathfrak{L}\mathfrak{T}^+} & \xrightarrow{\sim} & \mathbf{Dmod}(\mathbf{Gr}_G)^{\mathfrak{L}\mathfrak{N}\mathfrak{L}\mathfrak{T}^+}. \\ & & \uparrow \\ & & \mathbf{Dmod}(\overline{S^0})^{\mathfrak{L}\mathfrak{N}\mathfrak{L}\mathfrak{T}^+} \end{array}$$

$$\begin{array}{c} \mathbf{Whit}^!_\kappa(\mathbf{Gr}_G) \\ \downarrow j^{whit}_{!*} \quad \downarrow j^{whit}_! \\ \mathbf{Dmod}(\mathbf{Gr}_T) \end{array}$$

$$S^{-,\lambda} \xrightarrow{\quad j \quad} \overline{S^{-,\lambda}}$$

$$j_!(\omega_{S^{-,\lambda}}) \qquad \mathbf{IC}^{\frac{\infty}{2}+\lambda}$$

$$\mathcal{F} \mapsto \qquad \Gamma_{dR}(\mathbf{Gr}_G, \mathcal{F} \otimes -)$$