Start w/ Global Geometric Langlands:

$$\mathrm{Dmod}(\mathrm{Bun}_G) \simeq \mathrm{QCoh}(\mathrm{LocSys}_{\check{G}})$$

$$? \longleftrightarrow \otimes$$

$$\mathrm{Dmod}(\mathrm{Bun}_G)^{\otimes n} \longrightarrow \mathrm{Dmod}(\mathrm{Bun}_G)$$

$$\Updownarrow$$

$$K_{n+1} \in \mathrm{Dmod}(\mathrm{Bun}_G^{\times(n+1)})$$

$$\begin{array}{c} \mathrm{LocSys}_{\check{G}}^{\times n} \\ \uparrow \Delta \\ \mathrm{LocSys}_{\check{G}} \end{array}$$

$$\begin{array}{ccc} K_n & \longleftrightarrow & \Delta_*(\mathcal{O}_{\mathrm{LocSys}_{\check{G}}}) \\ \rotatebox{90}{$\in$} & & \rotatebox{90}{$\in$} \\ \mathrm{Dmod}(\mathrm{Bun}_G^{\times n}) & \simeq & \mathrm{QCoh}(\mathrm{LocSys}_{\check{G}}^{\times n}) \end{array}$$

- Expect: K_n makes sense in any sheaf theory

- $\mathrm{funct}(K_n) \in \mathrm{Funct}\left(\mathrm{Bun}_G^{\times n}(\mathbb{F}_q)\right)$

- $K_n^{cl} \in \mathrm{QCoh}\left(\left(T^*\mathrm{Bun}_G\right)^{\times n}\right)$

$$
\begin{tikzcd}
 & T^*\mathrm{Bun}_G \arrow[d] \\
J \arrow[ur, hook] \arrow[r] & \mathrm{Hitch}
\end{tikzcd}
$$

correct this.

$$K_n^{cl} = \mathcal{O}_{\left(T^*\mathrm{Bun}_G\right)^{\times n}_{\mathrm{Hitch}} / \ker\left(\cancel{J^n} \to J\right)}$$

- quasi-classical story can be obtained

- K_n equipped with a section.
  f_n - solution to the corresponding differential equation.

$L^2(\mathrm{Bun}_G(\mathbb{C}))$

- Write an analogous formula for f_n for $\mathbb{C} \rightsquigarrow \mathbb{Q}_p$.
