1108-14-200   **Jiwon Kim*** (`kim609@indiana.edu`). *Fixed Points on Period Spaces and Conjugacy Classes.*

Let $\mathcal{F}^{wa} = \mathcal{F}^{wa}(\mathbb{G}, \mathcal{N})$ be a p-adic period space, and $J^{\mathbb{G}} = \underline{Aut}^{\otimes}(N^{\mathbb{G}})$ be the associated automorphism group of the G-isocrystal. Then we can assume that $J^{\mathbb{G}}$ is an inner form of G. Let j be a regular elliptic element $J^{\mathbb{G}}(\mathbb{Q}p)$, and denote by $\mathrm{Fix}(j|\mathcal{F}^{wa})$ the set of fixed points of j on $\mathcal{F}^{wa}$. Let $x_0 \in \mathrm{Fix}(j|\mathcal{F}^{wa})$ be a 'base point'. One can then associate to any $x \in \mathrm{Fix}(j|\mathcal{F}^{wa})$ of j a rational conjugacy class in $G_{\mathcal{F}_{x_0}}$. We study this map from $\mathrm{Fix}(j|\mathcal{F}^{wa})$ to the set of rational conjugacy classes in $G_{\mathcal{F}_{x_0}}$. (Received January 13, 2015)

1