

## On Two mod $p$ Period Maps: Ekedahl–Oort and Fine Deligne–Lusztig Stratifications

vendredi 12 septembre 2025 09:30 (1 heure)

Consider a Shimura variety of Hodge type admitting a smooth integral model  $S$  at an odd prime  $p > 3$ . Consider its perfectoid cover  $S(p^\infty)$  and the Hodge-Tate period map introduced by A. Caraiani and P. Scholze. We compare the pull-back to  $S(p^\infty)$  of the Ekedahl-Oort stratification on the mod  $p$  special fiber of  $S$  and the pull back to  $S(p^\infty)$  of the fine Deligne-Lusztig stratification on the mod  $p$  special fiber of the flag variety which is the target of the Hodge-Tate period map. If time allowa, an application to the non-emptiness of Ekedhal-Oort strata is provided.

**Orateur:** ANDREATTA, Fabrizio (Univ. degli Studi di Milano)

**Classification de Session:** Morning Chair: Chris Daw