## SEMPARIS – Séminaires en région parisienne

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## **TBA**

## Mercredi 14 Novembre 2018, 10:00

IHES, Centre de conférences Marilyn et James Simons (Séminaire de Géométrie Arithmétique Paris-Pékin-Tokyo )

Domaines : hep-th

Titre: A motivic construction of ramification filtrations

Orateur : Shuji Saito (University of Tokyo)

Résumé: We give a new interpretation of Artin conductors of characters in the framework of theory of motives with modulus. It gives a unified way to understand Artin conductors of characters and irregularities of line bundle with integrable connections as well as overconvergent F-isocrystals of rank 1. It also gives rise to new conductors, for example, for G-torsors with G a finite flat group scheme, which specializes to the classical Artin conductor in case  $G = \mathbb{Z}/n\mathbb{Z}$ . We also give a motivic proof of a theorem of Kato and Matsuda on the determination of Artin conductors along divisors on smooth schemes by its restrictions to curves. Its proof is based on a motivic version of a theorem of Gabber-Katz. This is a joint work with Kay Rülling.