Continuity principle in ramification theory

Friday, 7 June 2024 11:30 (1 hour)

One of the goals of ramification theory is to compute the Euler-Poincare characteristic of a given sheaf by using an invariant measuring the ramification.

Bloch's revolutionary approach to this problem is to measure using CH_0.

After a long sought, this element of CH_0 had finally been constructed by T. Saito, by constructing the characteristic cycle.

In the first half of the talk, I'll explain an alternative construction using "continuity principle".

In the second half, using the continuity principle in another way, I'll give a proof to a conjecture of Serre on the construction of Artin representation in the equal characteristic case.

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