

The Third Kyushu Joint Seminar*

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**Wild ramification and the characteristic cycle
of an l -adic sheaf**

Saga University

January 11, 2014

Abstract

Since its introduction by Grothendieck in 1960's, l -adic sheaves on a variety of positive characteristic has been a basic tool in arithmetic geometry. Although the Grothendieck-Ogg-Shafarevich formula computing the Euler number using the ramification was established in 60's for a curve, its generalization to higher dimension was left remained for decades. I will report on recent progresses on the definition of the characteristic cycle of an l -adic sheaf and its application to the Euler number and vanishing cycles, guided by an analogy between the irregularity of a D -module and wild ramification of an l -adic sheaf.

Venue

Date: January 11 (Saturday), 2014.

Time: 16:00–17:00.

**Place: 1-st floor Lecture Room 101, Bulding DC,
Saga University.**

***This is a joint event with [Colloquium of Department of Mathematics, Saga University](#).**

About Kyushu Joint Seminar:

The idea could be traced back to many decades. Thanks to the Kyushu Shinkansen, now it becomes practically possible. We hope that the Q-semi, nick name for the KJS, would provide a common platform for these interested to act and play, with the aim to promote the mathematical activities in big Kyushu area.

The organizer committee consists of four, Takashi Ichikawa (ichikawa@ms.saga-u.ac.jp), Fumiharu Kato (kato@sci.kumamoto-u.ac.jp), Kunio Obitsu (obitsu@sci.kagoshima-u.ac.jp), and Lin Weng (weng@math.kyushu-u.ac.jp).

If you have good candidate for speaker, please feel free to contact us: It should not be bounded by our research fields. Currently, we would like to arrange the Q-semi 2-4 times a year in Kyushu area.