

## $p$ -ADIC COHOMOLOGIES AND RECIPROCITY LAWS

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In the first part of this course, we give an overview of the computation of the  $p$ -adic cohomology of varieties over local fields using the theory of  $(\varphi, \Gamma)$ -modules, following Colmez and Nizioł. In the second part, we discuss applications of this theory to the problem of explicit reciprocity laws.

The schedule of this course is:

- (1) March 12 at 11h, room 409.B in Omega building.
- (2) March 19 at 10h, room 409.B in Omega building.
- (3) April 9th at 10h, room 409.B in Omega building.
- (4) April 16th at 10h, room 409.B in Omega building.
- (5) April 23th at 10h, room 409.B in Omega building.