

## CONTENTS

1. Introduction .....	1
2. Preliminaries on representations of twisted groups .....	13
3. Twisted $\ell$ -adic sheaves .....	33
4. Gabber-Katz extensions .....	47
5. Geometric class field theory .....	55
6. Extensions of additive groups .....	73
7. Geometric local $\varepsilon$ -factors for sheaves of generic rank at most 1 .....	89
8. The product formula for sheaves of generic rank at most 1 (after Deligne) ..	103
9. Geometric local $\varepsilon$ -factors in arbitrary rank .....	111
10. The product formula: preliminaries .....	121
11. The product formula: proof .....	127
Bibliography .....	135