

CONTENTS

Introduction	1
<u>I. Generalities on Localization</u>	4
I.1. Kernel Functors	4
I.2. Localization at a Prime Ideal	8
<u>II. Symmetric Kernel Functors</u>	16
II.1. Localization at Symmetric Kernel Functors	16
II.2. Quasi-prime Kernel Functors	24
II.3. Reductions	31
<u>III. Sheaves</u>	42
III.1. Spec and the Zariski Topology	42
III.2. Affine Schemes	48
<u>IV. Primes in Algebras over Fields</u>	58
IV.1. Pseudo-places of Algebras over Fields	58
IV.2. Specialization of Pseudo-places	62
IV.3. Pseudo-places of Simple Algebras	67
IV.4. Primes in Algebras over Fields	71
IV.5. Localization at Primes, and Sheaves	81
<u>V. Application : The Symmetric Part of the Brauer Group</u>	86
V.1. Generic Central Simple Algebras	86
V.2. Two Theorems on Generic Crossed Products	90
V.3. The Modular Case	96
<u>VI. Appendix : Localization of Azumaya Algebras</u>	101
VI.1. The Center of $Q_\sigma(R)$	101
VI.2. Localization of Azumaya Algebras	109
VI.3. Azumaya Algebras over Valuation Rings	115
VI.4. Modules over Azumaya Algebras	119
References for the Appendix	122
References	123
Subject Index	