

MATH 695 CONSTRUCTIONS OF COMMUTATIVE RINGS

1. BOOK

S. Glaz. Commutative Coherent Rings. Lecture Notes in Mathematics, 1371, Springer-Verlag, Berlin 1989.

2. RESEARCH PAPERS

1. E. Bastida and R. Gilmer, Overrings and divisorial ideals of rings of the form $D+M$, Michigan Math. J. 20 (1992) 79--95
2. S. Gabelli and E. Houston, Coherentlike Conditions in Pullbacks, Michigan Math. J. 44 (1997) 99--122.
3. D. D. Anderson and M. Winders, Idealization of a module, J. Commutative Algebra, Vol. 1 (2009), 3--56.
4. M. Fontana and S. Gabelli, On the Class Group and the local Class Group of a Pullback, J. Algebra 181 91996) 803-835

3. SYLLABUS

WEEK	MATERIAL
From Book	
1	Cartesian squares.
2	$D+M$ Constructions
3	Trivial Ring Extension and the lambda dimension
From Papers	
4	Summary of Well-Known Results
5	Some conditions on the set of overrings
6	Divisorial Ideals
7	Dimension Theory of $R[X_1, \dots, X_n]$
8	Divisorial Ideals in Pullbacks
9	v-Coherent Pullbacks
10	Other Coherentlike Conditions
11	Mori and DVF Pullbacks
12	Properties of Ideals in Pullback Constructions
13	Ringification
14	Ideals and distinguished elements of Trivial Extensions
15	Some ring constructions and properties of Trivial Extensions