

Schedule of the seminar on category theory 2012.3—2012.6

Textbooks *Categories for the Working Mathematician*, by Saunder Mac Lane
Time Saturday evenings 18:00—21:00
Venue 数学中心 203
Coordinator 黄兆镇 (Phone: 88855820)

	Date	Contents	Speakers
1	2012.2.25	1.1--1.4 Axioms for categories, categories, functors, natural transformations	黄兆镇
2	2012.3.3	1.5--1.8 Monics, epis, and zeros, foundations, large categories, hom-sets	刘博辰
3	2012.3.10	2.1--2.4 Duality, contravariance and opposites, products of categories, functor categories	周 杨
4	2012.3.17	2.5--2.7 The category of all categories, comma categories, graph and free categories	沈骐彬
5	2012.3.24	2.8 Quotient categories 3.1--3.2 Universal arrows, the Yoneda Lemma	谢 颖
6	2012.4.7	3.3--3.4 Coproducts and colimits, products and limits	仲文迪
7	2012.4.14	3.5--3.7 Categories with finite products, groups in categories, colimits of representable functors	叶荣庆
8	2012.4.21	4.1--4.3 Adjunctions, examples of adjunctions, reflective subcategories	周 杨
9	2012.4.28	4.4--4.6 Equivalence of categories, adjoints for preorders, Cartesian closed categories	沈骐彬
10	2012.5.5	4.7--4.10 Transformation and composition of adjoints, subsets and characteristic functions, categories like Sets	仲文迪
11	2012.5.12	5.1--5.4 Creation of limits, limits by products and equalizers, limits with parameters, preservation of limits	叶荣庆
12	2012.5.19	5.5--5.7 Adjoints on limits, Freyd's Adjoint Functor Theorem, subobjects and generators	谢 颖
13	2012.5.26	5.8--5.9 The Special Adjoint Functor Theorem, adjoints in topology	刘博辰
14	2012.6.2	8.1--8.2 Kernels and cokernels, additive categories	周 杨
15	2012.6.9	8.3--8.4 Abelian categories, diagram lemmas	

Almost all the exercises should be worked out and discussed at the end of each session.