

LIST

- (1) Algebraic Theories [1]
- (2) Regular/Exact/Heyting Categories
- (3) The orthogonal subcategory problem
- (4) Abelian Categories
- (5) Function programming & Category Theory
- (6) Structures in a monoidal category – monoids, bialgebras, Hopf algebras ...
- (7) Multicategories [4]
- (8) Simplicial sets and quasicategories [7]
- (9) Categorical Logic [2] [6]
- (10) Metric Spaces, Generalized Logic, and Closed Categories [3]
- (11) ETCS: The Elementary Theory of the Category of Sets [5]

REFERENCES

- [1] J. Adámek, J. Rosický, E.M. Vitale, and F.W. Lawvere, *Algebraic theories: A categorical introduction to general algebra*, Cambridge Tracts in Mathematics, Cambridge University Press, 2010.
- [2] John Bell, *The development of categorical logic*.
- [3] F. William Lawvere, *Metric spaces, generalized logic, and closed categories*, Rendiconti del Seminario Matematico e Fisico di Milano **43** (1973), no. 1, 135–166.
- [4] Tom Leinster, *Higher operads, higher categories*, London Mathematical Society Lecture Note Series, Cambridge University Press, 2004.
- [5] Tom Leinster, *Rethinking set theory*, (2012).
- [6] Marquis and Reyes, *The history of categorical logic 1963-1977*.
- [7] Emily Riehl, *A leisurely introduction to simplicial sets*, 2011.