نظریه رسته و توپوس (Category and Topos Theory)

- S. Eilenberg and S. Mac Lane `General Theory of Natural Equivalences' *Transactions Amer.Math.Soc*. **58**: 247, 1954
- S. Eilenberg and N. Steenrod **Foundations of Algebraic Topology**, 1952
- S. Eilenberg and H. Cartan **Homological Algebra**, 1956
- A. Grothendieck and J.L. Verdier **Théorie des Topos et Cohomologie Etale des Schémas** Lecture notes in mathematics. Vol. 269, 1972
- Current definition of **Topos** due to W. Lawvere and M. Tierney

تعاریف اصلی رسته

- Object, arrow (morphism), composition and its two properties

  Examples

- Functors (covariant and contravariant)

  Examples (especially in topology to algebra)

- Natural transformations

  Examples

Axioms of Topos

1. ***Terminal object* 1**
2. ***Pullbacks***
3. ***Exponential***
4. ***Sub-object classifier***

   (Elementary topos)

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5. **Axiom of Infinity**

6. **Axiom of Choice**

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