

8<sup>th</sup> Session of Lecture Series on  
Formal and Logical Aspects of Computer Science

# Intuitionistic Modal Logic and Modal Type Systems

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Time : Thursday, October 15, 2009 (Mehr 23, 1388) 14:00 to 16:00

Place : School of Mathematics, IPM, Niavaran Square, Tehran, Iran

**Abstract:** In this talk, we discuss about Intuitionistic Modal Logic (IML). While possible-world semantics has long been adopted and agreed upon for classical modal logic, there is no general consensus on a single semantic framework for IML. The well-known semantic frameworks proposed for IML are then presented. The talk is also about how IML can act as a basis for modal type systems. A practical use of modal type systems in developing distributed programs concludes this lecture.

(Note : Topics covered by this lecture series are computational logic, type theory, topology in theoretical computer science, proof carrying code, formal specification and verification of systems, computability, proof theory, model checking, and so on.)