

*The Workshop on  
Model Theory of Valued Fields, October 1-8, 2018  
School of Mathematics, IPM, Tehran*

## **A Logical Diophantine Approach to the Real Algebraic Geometry**

**Shahram Mohsenipour**

*IPM*

*Iran*

In these talks we will give a brief introduction to the model theory of weak arithmetic and then show how by using ideas from real algebraic geometry, we can talk about possible relations between arithmetic and geometry in this context.