

## **Abstract**

In this thesis we will deal with the logic of public announcement which is a dynamic extension of epistemic logic. First we will explain the logic of truthful public announcement for the multiagent **S5** system. Then we will examine what the public announcement can look like in systems weaker than **S5**. We will focus namely on systems in which the **T** axiom is invalid and the epistemic modality is interpreted not as a "knowledge" but as a "belief". We will create new semantics of public announcement which is not necessarily truthful but it is believed to be true. We will also try to axiomatize systems that have arisen in this way.

Keywords: public announcement logic, logic for belief