Generalized type spaces
joint work with Miklós Pintér

Zsolt Udvari

CEU

Abstract

Ordinary type spaces (Heifetz and Samet, 1998) are essential ingredients of incomplete information games. With ordinary type spaces one can grab the notions of beliefs, belief hierarchies and common prior etc. However, ordinary type spaces cannot handle the notions of finite belief hierarchy and unawareness among others.

In this paper we consider a generalization of ordinary type spaces, and introduce the so called generalized type spaces which can grab all notions ordinary type spaces can and more, finite belief hierarchies and unawareness among others. We also demonstrate that the universal generalized type space exists.

Keywords and phrases: type space; unawareness; finite belief hierarchy; generalized type space; generalized belief hierarchy; incomplete information games.

JEL codes: C72, D83

References

Heifetz A, Samet D (1998) Topology-free typology of beliefs. Journal of Economic Theory 82:324–341