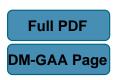
Discussiones Mathematicae General Algebra and Applications 29 (2009) 181–201 doi:10.7151/dmgaa.1157



## SEMI-OPEN SETS IN BICLOSURE SPACES

JEERANUNT KHAMPAKDEE AND CHAWALIT BOONPOK

Department of Mathematics, Brno University of Technology Technická 2, 616 69 Brno, Czech Republic

e-mail: jeeranunt@hotmail.com

## Abstract

The aim of this paper is to introduce and study semi-open sets in biclosure spaces. We define semi-continuous maps and semi-irresolute maps and investigate their behavior. Moreover, we introduce pre-semi-open maps in biclosure spaces and study some of their properties.

**Keywords:** closure operator, biclosure space, semi-open set, semi-continuous map, semi-irresolute map, pre semi-open map.

2000 Mathematics Subject Classification: 54A05.

## REFERENCES

- [1] J.M. Aarts and M. Mršević, A bitopological view on cocompact extensions, Topol. Appl. 83 (1991), 1–16.
- [2] C. Boonpok and J. Khampakdee, Generalized closed sets in biclosure spaces, to appear.
- [3] E. Čech, *Topological spaces*, (revised by Z. Frolík, M. Katětov), Academia, Prague 1966.
- [4] E. Čech, *Topological spaces*, Topological papers of Eduard Čech, Academia, Prague (1968), 436–472.

- [5] J. Chvalina, On homeomorphic topologies and equivalent set-systems, Arch. Math. Scripta Fac. Sci. Nat. UJEP Brunensis, XII 2 (1976), 107–116.
- [6] J. Chvalina, Stackbases in power sets of neighbourhood spaces preserving the continuity of mappings, Arch. Math., Scripta Fac. Sci. Nat. UJEP Brunensis, XVII 2 (1981), 81–86.
- [7] J. Deak, On bitopological spaces, I, Stud. Sci. Math. Hungar. 25 (1990), 457–481.
- [8] B. Dvalishvili, On some bitopological applications, Mat. Vesn. 42 (1990), 155–165.
- [9] J. Khampakdee, Semi-open sets in closure spaces, to appear.
- [10] J.C. Kelly, *Bitopological spaces*, Proc. London Math. Soc. **3** (13) (1969), 71–79.
- [11] N. Levine, Semi-open sets and semi-continuity in topological spaces, Amer. Math. Monthly **70** (1963), 36–41.
- [12] J. Šlapal, Closure operations for digital topology, Theoret. Comput. Sci. **305** (2003), 457–471.

Received 29 April 2009 Revised 1 July 2009