

On quasi Isbell topology

D.N. Georgiou^a and A.C. Megaritis^b

^a*University of Patras, Department of Mathematics,
265 00 Patras, Greece*

^b*Technological Educational Institute of Western Greece,
Department of Accounting and Finance,
302 00 Messolonghi, Greece*

Abstract

In this talk we present the so called quasi Scott topology on a complete lattice, denoted by τ_{qSc} . This topology is always larger than or equal to the Scott topology and smaller than or equal to the strong Scott topology. If we consider the complete lattice $\mathcal{O}(Y)$ of all open subsets of a space Y , then the topology τ_{qSc} on $\mathcal{O}(Y)$ defines, by a standard way, on the set $C(Y, Z)$ of all continuous maps of the space Y to a space Z a topology t_{qIs} calling quasi Isbell topology. This topology is always larger than or equal to the Isbell topology and smaller than or equal to the strong Isbell topology. Results and problems concerning the topologies τ_{qSc} and t_{qIs} are given.

References

- [1] D. N. Georgiou, A. C. Megaritis, *The Quasi Scott (Lawson) Topology and q -Continuous (q -Algebraic) Complete Lattices*, Filomat 29:1 (2015), 193–207.
- [2] D. N. Georgiou, A. C. Megaritis, *The quasi Isbell topology on function spaces*, Colloq. Math. 2590 (2015), 13–24.