

## PROPERTIES OF SUBSPACE LATTICES RELATED TO REFLEXIVITY

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This is an abstract of the PhD thesis *Properties of Subspace Lattices related to Reflexivity* written by S. Papapanayides under the supervision of Dr I.G. Todorov at the School of Mathematics and Physics, Queen's University Belfast, Belfast and submitted in September 2011.

This PhD focuses on issues such as the reflexivity of the tensor product of two lattices, the lattice tensor product formula (LTPF) and property (p). Property (p) was firstly introduced by Shulman and Todorov in [3] and the LTPF by Hopenwasser in [2]. The main results are that the tensor product of a subspace lattice having the ultraweak rank one density property and a commutative subspace lattice has property (p) and that for an atomic boolean subspace lattice having the ultraweak rank one density property and a reflexive subspace lattice, the LTPF holds. We also investigate other properties related to subspace lattices such as semistrong closedness. Furthermore, following the work of Arveson in [1], we study and describe algebras associated to certain classes of subspace lattices.

### REFERENCES

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