## Miroslav Hušek; Władysław Kulpa Open images of orderable spaces

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=  $O_{\mathbf{x}}^{*}(\mathbf{X})$ ,  $C^{*}(\mathbf{Y}) = C_{\mathbf{x}}^{*}(\mathbf{Y})$  and  $\mathbf{\sigma}\mathbf{X} = \mathbf{\sigma}\mathbf{Y} = [0,1]^{\omega_{1}}$  :  $\mathbf{X} = \{\mathbf{x}_{\alpha}\} \in [0,1]^{\omega_{1}} \mid \{\mathbf{x}_{\alpha} \mid \mathbf{x}_{\alpha} \text{ rational}\} \mid \leq \omega \}$ ,  $\mathbf{Y} = \{\mathbf{x}_{\alpha}\} \in [0,1]^{\omega_{1}} \mid \{\mathbf{x}_{\alpha} \mid \mathbf{x}_{\alpha} \text{ irrational}\} \mid \leq \omega \}$ .

## OPEN IMAGES OF ORDERABLE SPACES

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The problem of van Wouwe was solved. Every suborderable space is an open continuous image of an orderable space. As corollaries of the procedure one gets generalizations to higher cardinals of known results for first countable spaces (linearly uniformizable space is a topological space compatible with a uniformity having a monotone base, a generalized Baire space is a box-product  $(\kappa^A)_A$  where  $\kappa$  is a regular infinite cardinal with the discrete topology, a caterpillar space is a topological  $T_1$ -space having a monotone base of neighborhoods at each point):

(1) Every caterpillar space is an open continuous image of a subspace of a generalized Baire space. (2) Every completely linearly uniformizable space is an open continuous image of a generalized Baire space.