

**Simon, P.**

**Applications of independent linked families.** (English) [Zbl 0615.54004](#)

Topology theory and applications, 5th Colloq., Eger/Hung. 1983, Colloq. Math. Soc. János Bolyai 41, 561-580 (1985).

[For the entire collection see [Zbl 0588.00022](#).]

Weak  $p$ -points and  $\mathbb{C}$ -OK points are used to prove the following results: (1) No infinite compact  $F$ -space is subhomogeneous. This generalizes Frolik's theorem that no infinite compact  $F$ -space is homogeneous. (2) An extremally disconnected space of weight  $\leq \mathbb{C}$  is homeomorphic to a  $\mathbb{C}$ -OK subset of  $\omega^*$ . This generalizes the fact that such spaces embed in  $\omega^*$ . (3) There are  $2^{\mathbb{C}}$  pairwise RK-incomparable RF-minimal points in  $\omega^*$ , where RK is the Rudin-Keisler order, and RF the Rudin-Frolik order. This generalizes the theorem of Shelah that there are  $2^{\mathbb{C}}$  pairwise RK-incomparable points in  $\omega^*$ .

Reviewer: [J.Roitman](#)

**MSC:**

- [54A25](#) Cardinality properties (cardinal functions and inequalities, discrete sub-sets)
- [54D40](#) Remainders in general topology

[Cited in 4 Documents](#)

**Keywords:**

Weak  $p$ -points;  $bbfC$ -OK points; compact  $F$ -space; extremally disconnected space; RF-minimal points; Rudin-Keisler order; Rudin-Frolik order; RK-incomparable points