On the complemented subspace problem

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The well-known Complemented Subspace Problem for $C(K)$-spaces, which asks whether every complemented subspace of a $C(K)$-space is also isomorphic to a $C(K)$-space, has been recently solved by G. Plebanek and A. Salguero-Alarcón in the negative.

The goal of this talk is to sketch the main ideas behind their construction and to show that their space not only fails to be isomorphic to a $C(K)$-space but it is not even isomorphic to a Banach lattice.

This talk is based on a work in progress with David de Hevia, Alberto Salguero-Alarcón and Pedro Tradacete.