

## **On the structure of non-dentable subsets of $C(\omega^{\omega^{\kappa}})$**

In this talk I present our paper (joined with M. Petrakis), where it is shown that there is no closed, convex, bounded, non-dentable subset  $K$  of  $C(\omega^{\omega^{\kappa}})$  such that on subsets of  $K$  the PCP (Point of Continuity Property) and the RNP (Radon-Nikodym Property) are equivalent properties. Then applying the Schachermayer-Rosenthal theorem, we conclude that every non-dentable  $K$  contains a non-dentable subset  $L$  so that on  $L$  the weak topology coincides with the norm topology. It follows from known results that the RNP and the KMP (Krein-Milman Property) are equivalent on the subsets of  $C(\omega^{\omega^{\kappa}})$ .