

# Projections onto Hyperplanes in Banach Spaces $C(K)$

Damian Sobota

University of Vienna, Austria

## **Abstract**

A *hyperplane* in a Banach space  $X$  is a linear subspace of codimension 1 or, equivalently, the kernel of a continuous functional on  $X$ . In this talk we will investigate various properties of hyperplanes in Banach spaces  $C(K)$  of continuous real-valued functions on compact spaces  $K$  endowed with the supremum norm. We will be particularly interested in computing the minimal norms of projections onto hyperplanes as well as in characterizing those hyperplanes which are 1-complemented.