

TITLE: Spanning configurations

ABSTRACT: A finite sequence of subspaces  $(W_1, W_2, \dots, W_r)$  of the standard  $k$ -dimensional complex vector space  $\mathbb{C}^k$  is a *spanning configuration* if  $W_1 + W_2 + \dots + W_r = \mathbb{C}^k$  as vector spaces. I will discuss how spanning configurations generalize Grassmannians and flag varieties and present the integral cohomology of spanning configurations corresponding to a fixed dimension sequence  $\dim(W_1), \dim(W_2), \dots, \dim(W_r)$ . I will also relate certain spanning configurations to the delta operators of symmetric function theory. Joint with Brendan Pawlowski and Andy Wilson.