

# Combinatorics Seminar

Friday February 8, 2013 at 2PM

Room B1.01

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## Monochromatic $K_r$ -decompositions of graphs

Given graphs  $G$  and  $H$ , and a colouring of the edges of  $G$  with  $k$  colours, a monochromatic  $H$ -decomposition of  $G$  is a partition of the edge set of  $G$  such that each part is either a single edge or forms a monochromatic graph isomorphic to  $H$ . Let  $\phi_k(n, H)$  be the smallest number  $t$  such that any graph  $G$  of order  $n$  and any colouring of its edges with  $k$  colours admits a monochromatic  $H$ -decomposition with at most  $t$  parts. Results for the function  $\phi_k(n, K_r)$  for  $k \geq 2$  and  $r \geq 3$  will be presented.

**There will be refreshments for the attendees.  
Please bring your own mugs (for coffee/tea) if possible.  
Everyone is welcome.**



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