1145-05-1669 Anand Pillay\* (apillay@nd.edu), Department of Mathematics, University of Notre Dame, Notre Dame, IN 46556. Regularity theorems in group environments. Preliminary report.

The talk is on work with Gabe Conant and Caroline Terry, and concerns the asymptotic behavior of subsets A of a finite group G, sometimes under additional assumptions on the graph defined by  $xy \in A$ . I will survey the existing results and methods, and discuss new results if appropriate. (Received September 23, 2018)