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**Gabor Sarkozy\*** ([gsarkozy@cs.wpi.edu](mailto:gsarkozy@cs.wpi.edu)), Department of Computer Science, WPI, 100 Institute Road, Worcester, MA 01609. *Monochromatic covers in edge-colored graphs and hypergraphs.*

We survey some results on the following problem: Say we are given fixed positive integers  $s, t$  and a family of graphs  $\{\mathcal{F}\}$ . Minimizing over all  $t$ -edge colorings of the complete graph on  $n$  vertices, we ask for the maximum number of vertices that can be covered by at most  $s$  monochromatic members of  $\{\mathcal{F}\}$ . This problem unites two classical problems: at one end of the spectrum ( $s = 1$ ) we have the Ramsey problem, while at the other end we have cover problems. But there are some interesting problems "in-between" as well. Several of the results are joint with András Gyárfás and/or Endre Szemerédi. (Received July 18, 2016)