

1056-05-1146 **Sebastian M Cioabă*** (cioaba@math.udel.edu), Department of Mathematical Sciences,
Newark, DE 19713. *Decompositions of graphs and hypergraphs.*

In 1971, Graham and Pollak proved the minimum number of complete bipartite subgraphs that partition the edge-set of the complete graph on n vertices, is $n-1$. In 1986, Alon extended Graham-Pollak Theorem to uniform hypergraphs. I will present some improvements of Alon's result and I will list some related open problems. This is joint work with André Kündgen (Cal State, San Marcos) and Jacques Verstraëte (UC-San Diego). (Received September 21, 2009)