## 1113-05-232Jill Faudree, Ralph Faudree, Ron Gould, Paul Horn\* (paul.horn@du.edu) and Michael<br/>Jacobson. Degree sum and vertex dominating paths.

We investigate degree sum conditions which guarantee that a graph contains a short dominating path. In particular we show that a graph satisfying  $\sigma(2) \geq \frac{2n}{k+2} + c(k)$  contains a dominating path whose length is the same order as the size of a smallest dominating set. Along the way we answer some questions in a recent paper of Faudree, Gould, Jacobson and West. (Received August 23, 2015)