1044-05-203 Anne C Sinko* (Anne.Sinko@oberlin.edu), Rice 211, Oberlin, OH 44074, and Peter J. Slater. R-Parametric Chains.

The standard, well-studied, well-known chain of parameters $ir(G) \leq \gamma(G) \leq i(G) \leq \beta(G) \leq \Gamma(G) \leq IR(G)$ arises from the observations that an independent set is maximally independent if and only if it is dominating, and a dominating set is minimally dominating if and only if it is irredundant. We observe that these parameters are defined relative to the edge set E(G). By considering two natural extensions of independence and varying the collection $\mathcal{R} = \{R_1, R_2, ..., R_t\}$ of subsets of the vertex set relative to which these notions of "independence" are defined results in several generalized \mathcal{R} -parametric chains. (Received September 01, 2008)