Degree Sequences in Multigraphs.

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In 1988, Chartrand et al., [1] posed the question "Assign positive integer labels to the edges of a simple connected graph of order at least 3 in such a way that the graph becomes irregular, i.e., the weights (label sums) at each vertex are distinct. What is the minimum value of the largest label over all such irregular assignments?"

This problem arose from a consideration of multigraphs and the 'positive integer labels' assigned to each edge represent the number of edges parallel to that edge with 1 representing a simple edge connection between 2 vertices.

In this talk we consider degree sequences of certain graphs under the above Chartrand constraint when we extend the concept of multigraph to include loops.

[1] G. Chartrand, M.S. Jacobson, J. Lehel, O.R. Oellermann, S. Ruiz and F. Saba, Irregular networks, *Cong. Numer*. **64** (1988), 187--192.