Results on Additive Coloring and Additive Chromatic Number of Halin graphs

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Let G be a simple graph. An additive coloring of G is an assignment of integers to the vertices of G such that for every two adjacent vertices the sums of integers assigned to their neighbors are different. The additive chromatic number of G is the least integer k such that G has an additive coloring from the vertex set of G to $\{1, 2, \ldots, k\}$. And the sigma chromatic number of G is the minimum number of integers required in an additive coloring of G.

A Halin graph is a plane graph H constructed as follows. Let T be a tree of order at least 4. All vertices of T are either of degree 1 or of degree at least 3. Let C be a cycle connecting the leaves of T in such a way that C forms the boundary of the unbounded face.

In this talk, I will present results on additive coloring and additive chromatic number of Halin graphs.