Identifying Coloring in Graphs with Twins

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Abstract : Recently, several vertex identifying notions were introduced (identifying coloring, lid-coloring,...); these notions were inspired by identifying codes. All of them, as well as original identifying code, is based on separating two vertices according to some conditions on their closed neighborhood. Therefore, twins can not be identified. So most of known results focus on twin-free graph. Here, we show how twins can modify optimal value of vertex-identifying parameters for identifying coloring and locally identifying coloring.