



Unavoidable subgraphs in a graph with large matching number



Boram Park

Ajou University, Korea

7 January 2019 (Monday), 3pm to 4pm
Room 416, School of Mathematics, Sun Yat-sen University

Given a graph parameter ρ , every graph G with sufficiently large $\rho(G)$ contains a ‘well-structured’ induced subgraph H with large $\rho(H)$. The classical Ramsey’s theorem deals with the case when the graph parameter under consideration is the number of vertices; there is also a Ramsey-type theorem regarding connected graphs. In other words, Ramsey’s theorem is for unavoidable structures in a graph with large number of vertices.

Given a graph G , the matching number and the induced matching number of G is the maximum size of a matching and an induced matching, respectively, of G . In this paper, we formulate Ramsey-type theorems for the matching number and the induced matching number regarding connected graphs. Along the way, we obtain a Ramsey-type theorem for the independence number regarding connected graphs as well. The work is based on joint work with Ilkyoo Choi, Michitaka Furuya, and Ringi Kim.

Guangzhou Discrete Mathematics Seminar

Website <http://www.gzdmseminar.cn>

Mirror site <http://www.cantab.net/users/henry.liu/gzdmseminar.htm>



QR code of the
seminar series