Guangzhou Discrete Mathematics Seminar



Cycle problems and path problems in digraphs



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Cycle problems and path problems in graphs and digraphs have been studied extensively for more than half a century. They have formed a fruitful research field containing lots of interesting results and challenging problems on graph theory, algorithm design and computational complexity. In this talk, I will mainly focus on theoretical aspect. Firstly, I will give a rough overview on the various conditions and richful structures in this field. Then, due to my personal bias, I will go a little further into several topics on cycles and paths in digraphs, including different forms of degree conditions for hamiltonian cycles, cycles and paths of many lengths, and a special class of digraphs – tournaments