## The Vertex Degree Distance of One Vertex Union of the Cycle and the Star

Authors : Ying Wang, Haiyan Xie, Aoming Zhang<br>Abstract : The degree distance of a graph is a graph invariant that is more sensitive than the Wiener index. In this paper, we calculate the vertex degree distances of one vertex union of the cycle and the star, and the degree distance of one vertex union of the cycle and the star. These results lay a foundation for further study on the extreme value of the vertex degree distances, and the distribution of the vertices with the extreme value in one vertex union of the cycle and the star.<br>Keywords : degree distance, vertex-degree-distance, one vertex union of a cycle and a star, graph<br>Conference Title : ICGCA 2020 : International Conference on Graph Computation and Applications<br>Conference Location : Lisbon, Portugal<br>Conference Dates : September 16-17, 2020

