Divide-and-conquer is a well-established computer science paradigm widely employed for solving complex problems. One crucial aspect of divide-and-conquer algorithms is the identification of an effective separator, which presents a significant challenge. This talk firstly introduces several typical separator algorithms, e.g., k-path separator[PODC'06] and sparse cover [Algorithmica'14]. Sequentially, we find these algorithms just applied in planar graphs, they do not cater to the requirements of our complex network. So based on these formal algorithms, we explore a new separator using the path separator to planar and minor free graphs.