A k-factor of a graph $G = (V(G), E(G))$ is a k-regular spanning subgraph of $G$. A k-factorization is a partition of $E(G)$ into k-factors. If $V_1, \ldots, V_p$ are the $p$ parts of $V(K(n, p))$ (the complete multipartite graph with $p$ parts, each of size $n$), then a holey k-factor of deficiency $V_i$ of $K(n, p)$ is a k-factor of $K(n, p) - V_i$ for some $i$ satisfying $1 \leq i \leq p$. Hence a holey k-factorization is a set of holey k-factors whose edges partition $E(K(n, p))$. A holey Hamiltonian decomposition is a holey 2-factorization of $K(n, p)$ where each holey 2-factor is a connected subgraph of $K(n, p) - V_i$ for some $i$ satisfying $1 \leq i \leq p$. A (holey) k-factorization of $K(n, p)$ is said to be fair if the edges between each pair of parts are shared as evenly as possible among the permitted (holey) factors. In this talk the existence of fair holey 1-factorizations and of fair holey Hamiltonian decompositions of $K(n, p)$ will be discussed, along with a basic introduction to the amalgamation proof technique.