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Ryo Nikkuni* (nick@lab.twcu.ac.jp). *Capturing links in spatial complete graphs.*

We say that a set of pairs of disjoint cycles $\Lambda(G)$ of a graph G is linked if for any spatial embedding f of G there exists an element λ of $\Lambda(G)$ such that the 2-component link $f(\lambda)$ is nonsplittable, and also say minimally linked if none of its proper subsets are linked. In this talk, we show that: (1) the set of all pairs of disjoint cycles of G is minimally linked if and only if G is essentially same as a graph in the Petersen family, and (2) for any two integers $p, q \geq 3$, we exhibit a minimally linked set of Hamiltonian (p, q) -pairs of cycles of the complete graph K_{p+q} with at most eighteen elements. (Received September 07, 2021)