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In this talk, we will introduce some background of selection principle mathematics and the connection of cardinal invariants with it. In particular, motivated by the open problem whether, consistently, every product of two Menger-bounded subgroups of the Baer-Specker group $\mathbb{Z}^\omega$ is Menger-bounded; equivalently, whether Menger-bounded and Scheepers-bounded subgroups of the Baer-Specker group are, consistently, the same. We consider a more general class of Menger-bounded and Scheepers-bounded sets in metrizable groups. We proved the productivity of Menger-bounded set is not hold in ZFC. The productivity of Scheepers-bounded set or group is equivalent to NCF, which is also equivalent to the union of each two Scheepers-bounded set is still Scheepers-bounded set. We also proved that the finite quotient of Scheepers-bounded subset of $[\omega]^\omega$ is Scheepers-bounded is equivalent to there is no rapid filter.

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