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**Chi-Kwong Fok\*** ([ckfok@nyu.edu](mailto:ckfok@nyu.edu)), Academic Building, 1555 Century Avenue, Pudong New Area, Shanghai, 200122, Peoples Rep of China. *A stroll in equivariant K-theory.*

Equivariant K-theory is a generalized equivariant cohomology theory which is a hybrid of the K-theory of a topological space and the representation theory of the group acting on it. It serves as the first instance of the framework for localization, which is an important technique in equivariant topology, and is used to formulate equivariant index theorem and geometric quantization. In this talk, we will review the basics and some important results in equivariant K-theory and, time permitting, mention our recent results in this area. (Received January 25, 2022)