Speaker: **Yang, Zhiqing**
Title: *A construction of p-adic group action on Menger compacta*
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Abstract: A generalized version of the Hilbert 5th problem, called the Hilbert-Smith conjecture, asserts that among all locally compact groups only Lie group can act effectively on manifolds. It follows from the work of Newman and Smith that it is equivalent to the special case when the topological group is the p-adic integers group $\widehat{Z}_p = \varprojlim \{Z/p^n Z, \phi_n\}$. Although no effective actions of p-adic group on manifolds has yet been constructed, there do exist p-adic group actions on Menger manifolds. We give a new construction of p-adic group action on Menger compacta.