Title: Universal compacta in dimension theory
Speaker: Leonard Rubin, University of Oklahoma

Abstract:

Let $C$ be a class of spaces. An element $Z \in C$ is called universal for $C$ if each element of $C$ embeds topologically in $Z$. It is well-known that for each $n \in \mathbb{N}$, there exists a universal element for the class of metrizable compacta $X$ of (covering) dimension $\dim X \leq n$.

There are other dimension theories, in particular, cohomological dimension over an abelian group $G$, denoted $\dim_G$. We will discuss the question of whether universal elements exist for the class of metrizable compacta $X$ with $\dim_G X \leq n$. 