HYPERCYCLICITY AND SUPERCYCLICITY OF COMPOSITION OPERATORS ON $H^2(\mathbb{D})$

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Abstract: In this expository talk we will be concerned with hyper-cyclicity and super-cyclicity of composition operators with linear fractional symbols on the Hardy space $H^2(\mathbb{D})$. We will give the proof of the well-known result: for a linear fractional $\varphi : \mathbb{D} \to \mathbb{D}$, $C_\varphi$ is hyper-cyclic on $H^2(\mathbb{D})$ if and only if $\varphi$ is hyperbolic or $\varphi$ is a parabolic automorphism. We will also give the proof of the fact that if $\varphi$ is a parabolic non-automorphism then $C_\varphi$ is not super-cyclic.

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Place: Sabancı University, Karaköy Communication Center
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