Benjamin Célariès (Univ. Claude Bernard Lyon 1)

On the hidden point spectrum of composition operators

Let $Hol(D)$ be the space of holomorphic functions on the open unit disk D of the complex plane. Let X be an arbitrary Banach space which embedds continuously in $Hol(D)$. The aim of this talk is to describe the spectral projections on the eigenspaces of C_φ, where $\varphi : D \to D$ is holomorphic, φ has a fixed point in D, and $C_\varphi \in \mathcal{L}(X)$ is given by $C_\varphi(f) = f \circ \varphi$. The main interest of our result is that it is still valid for eigenspaces associated with non-isolated eigenspaces.