

**Title:** Chaos and hyperbolic properties for linear operator on  $L^p$  spaces

**Abstract**

We investigate notions like transitivity, Li-Yorke chaos coming from topological dynamics in the linear setting, and new notions originally defined in a non-linear framework like hyperbolicity, the shadowing property and expansivity. We focus in particular on the class of composition operators on arbitrary measure spaces. This class includes the weighted shifts as a special case.