Title of the talk: *On a class of Kato manifolds*

Abstract: In this talk we describe Kato manifolds, also known as manifolds with global spherical shell. Following a construction of M. Brunella, we prove that a large class of these manifolds carries locally conformally Kähler metrics. We then consider a specific class, which can be seen as a higher dimensional analogue of Inoue-Hirzebruch surfaces, and study several of their analytical properties. In particular, we give new examples, in any complex dimension $n \geq 3$, of compact locally conformally Kähler manifolds with algebraic dimension $n-2$, algebraic reduction bimeromorphic to $\mathbb{CP}^{n-2}$ and admitting non-trivial holomorphic vector fields. These results are joint work with Nicolina Istrati (University of Tel Aviv) and Massimiliano Pontecorvo (Roma Tre University).