Abstract

In the setting of algebraic geometry, formal schemes are intensively studied in the literature. Motivated by applications to representation theory of Lie groups, we study similar objects, called formal manifolds, in the setting of differential geometry. In this talk, we will give a brief introduction to the general theory of formal manifolds.

Also, we will introduce and study a notion of what we call formal Lie groups, which can be thought of an analogue of formal groups in the setting of differential geometry.