

Laszlo Lempert: Complex analysis on (generalized) loop spaces

Abstract: Given a complex manifold X , maps of the circle into X , of some fixed regularity, form an infinite dimensional complex manifold, called the loop space of X . I will briefly motivate the study complex analysis on such loop spaces, then survey the present state of art, and finally discuss a problem of analytic continuation in loop spaces in the spirit of Hartogs and Serre.